USER MANUAL
FOR
FIRST PROFESSIONAL BAMS CURRICULUM



(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

प्राणाभिसरः प्राणायतनानाम्

प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

National Commission for Indian System of Medicine

The National Commission for Indian System of Medicine is the statutory body constituted under NCISM Act, 2020 vide gazette notification extraordinary part (ii) section (i) dated 21.09.2020.

An Act..

- to provide for a medical education system that improves access to quality and affordable medical education, ensures availability of adequate and high quality medical professionals of Indian System of Medicine in all parts of the country;
- that promotes equitable and universal healthcare that encourages community health perspective and makes services of such medical professionals accessible and affordable to all the citizens;
- that promotes national health goals;
- that encourages such medical professionals to adopt latest medical research in their work and to contribute to research;
- that has an objective periodic and transparent assessment of medical institutions and facilitates maintenance of a medical register of Indian System of Medicine.
- for India and enforces high ethical standards in all aspects of medical services;
- that is flexible to adapt to the changing needs and has an effective grievance redressal mechanism and for matters connected therewith or incidental thereto

Graduate Attributes: -

Ayurved Samhiats explain many attributes of Ayurved Physician. Charak Samhita has explained the Qualities of *Pranabhisar* Vaidya, (Saviour), *Chikitsaprabhrut, Vaidyavrutti* and many quotes from almost all chapters of samhita. Sushrut Samhitas has elaborate description of teaching learning process and qualities of Vaidya in many chapters e.g. Prabhashaneeya. similarly, Ashtang sangrah and Hridaya and other samhitas contributed many such quotes.

These are the graduate attributes compiled from samhitas. (A student after completion of the course, should gain these attributes.)

Graduate Attributes (GA) Sanskrit and English Translation	
GA1	स्वस्थातुरयोःकृते हेतुलिङ्गऔषधात्मकस्य त्रिसूत्रात्मकस्य आयुर्वेदस्य ज्ञाता (भवेत्) Ayurveda professional who is well versed with the Trisutra framework i.e. causes (Hetu), symptoms (Linga) and therapeutics (Aushadha) for the maintenance of health and management of disease
GA2	विविधगुरुशास्त्रसेवनादिभिः पर्यवदातता विशुध्द ज्ञानवत्ता बहुशो दृष्टकर्मता च Erudite scholar of pure knowledge of Ayurveda learnt from various gurus, contemporary disciplines and thorough observation of multiple procedures. (Variety of learning experiences.)
GA3	प्रकृतिवितर्कयुक्तिप्रतिपत्तिविद् (भवेत्) Physician with a rational approach to clinical decision making that is holistic and based on uniqueness of individual (Prakruti).
GA4	कर्म कुशल जितहस्ता च (भवेत्) Physician who is dexterous and skilled at performing therapeutic maneuvers.
GA5	विज्ञाता शासिता योक्ता चिकित्साप्रभृत: (प्राणाभिसर:) च (भवेत्) Saviour of lives, who is well equipped with requisite knowledge, leadership attributes and the ability to practice holistic management of diseases.
GA6	दक्ष: शुचि: सदवृत्तशील: करुणावान च (भूत्वा वर्तेत)

	Agile, wise, virtuous, ethical and compassionate professional physician.
GA7	सतताध्ययनपर: (भवेत्) Self-directed learner taking efforts to enrich his qualities (knowledge and skills) to improve healthcare and societal well-being.
GA8	सुष्ठु संभाषणक्षम: (स्यात्) Eloquent or good communicator who effectively communicates with patients, families, community and peers.
GA9	चिकित्सक अन्वेषक अध्यापक गुणानां ज्ञाता अभिकाक्षिण: च (भवेत्) Professional who knows the qualities of a practitioner, researcher and academician and aspires to be one.

Programme learning outcomes (PO)	
At the end of the BAMS programme, the students will be able to:	
PO1	Demonstrate comprehensive knowledge and application of the Trisutra concept to explore root causes, identify clinical manifestations of disease to treat ailments and maintain healthy status.
PO2	Demonstrate knowledge and skills in Ayurveda, acquired through integration of multidisciplinary perspectives and keen observation of clinical and practical experiences.
PO3	Demonstrate proficiency in holistic, unique assessment of an individual for rational approach and decision-making in management of disease and maintenance of health.

PO4	Perform procedures and therapeutic maneuvers with skill and dexterity in a variety of situations.
PO5	Demonstrate knowledge, skills and attitudes to provide holistic quality care and preparedness to practice.
PO6	Demonstrate agility, virtuous and ethical behavior and compassion to improve the well-being of individuals and society.
PO7	Demonstrate self-directedness in pursuit of knowledge and skills, which is required for advancing health care and wellbeing of society.
PO8	Demonstrate the ability to effectively communicate with patients, families, community and peers
PO9	Demonstrate an understanding of qualities and required skills as a practitioner, researcher and academician and an aspirations to become one.

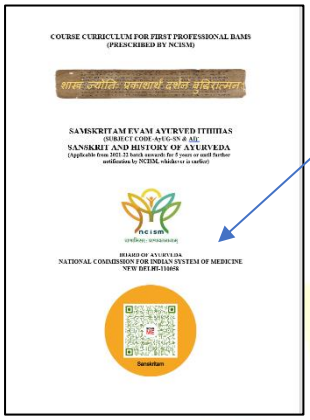
GA1 to GA9 are Matched with PO1 to PO9 Respectively.

ncism
प्राणाभिसरः प्राणायतनानाम्

User manual.

Welcome to new curriculum of NCISM for I Professional BAMS (Ayurvedacharya).

This is an introduction before reading the curriculum file for any course. These instructions will help reader to easily retrieve the information from the document. This document involves many familiar and less familiar terms. Some of them are explained in here.

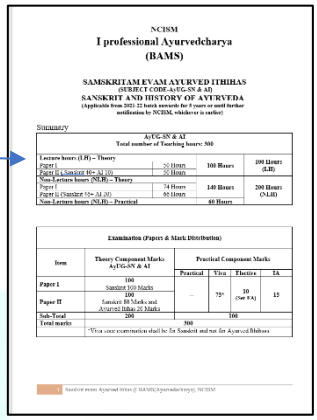

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

SAMSKRITAM EVAM AYURVED ITIHIHAS
(SUBJECT CODE-AyUG-SN & AI)
SANSKRIT AND HISTORY OF AYURVEDA

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

First Page: Contains Name, Code, Year and "QR code" for downloading the document.

Second page is Summary page for the Course. The Page will provide at a glance information of Lecture and non-Lecture hours, Distribution of hours as per papers, Distribution of Marks (Theory and Practical).


NCISM
I professional Ayurvedcharya
(BAMS)

SAMSKRITAM EVAM AYURVED ITIHIHAS
(SUBJECT CODE-AyUG-SN & AI)
SANSKRIT AND HISTORY OF AYURVEDA

Summary

AyUG-SN & AI
Total number of Teaching hours: 500

Lecture hours (LH) – Theory			
Paper I	50 Hours	100 Hours	100 Hours (LH)
Paper II (Sanskrit 50+ AI 50)	50 Hours		
Non-Lecture hours (NLH) – Theory			
Paper I	54 Hours	140 Hours	200 Hours (NLH)
Paper II (Sanskrit 52+ AI 88)	86 Hours		
Non-Lecture hours (NLH) – Practical		60 Hours	

Examination (Papers & Mark Distribution)

Item	Theory Component Marks AyUG-SN & AI	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100 Sanskrit 100 Marks	-	75*	10 (Set 9 A)	15
Paper II	100 Sanskrit 80 Marks and Ayurved Itihas 20 Marks				
Sub-Total	200	100			
Total marks	300				

*Viva voce examination shall be for Sanskrit and not for Ayurved Itihas

Next table is Index. All the major tables are indexed.

Curriculum: The curriculum is defined as the guideline of the academic content covered by an education system while undergoing a particular course or program. Curriculum has a wider scope which covers the knowledge, attitude, behaviour, manners, performance & skills that are imparted or inculcated in a student. It contains every aspect from objectives to assignments. This is outcome-based approach of the curriculum.

Graduate attributes reflect the particular quality and feature or characteristics of an individual, including the knowledge, skills, attitudes and values that are expected to be acquired by a graduate through studies at the higher education institution.

The graduate attributes include capabilities that help strengthen learners' abilities for widening current knowledge base and skills, gaining new knowledge and skills, undertaking future studies, performing well in a chosen career and playing a constructive role as a responsible citizen in the society.

Program learning Outcomes deal with the general aspect of graduation for a BAMS program, and the competencies and expertise a graduate will possess after completion of the program. Name of the Programme : Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery - BAMS)

As per new MSE, This programme (BAMS) is divided in three Professional years of 1.5 years each, followed by 1 year of internship. I professional BAMS has five courses (Subjects).

Course Code and Name of Course

	Course code	Name of the Course
1	AyUG SN & AI	Sanksrit and Ayurved Itihas
2	AyUG-PV	Padartha Vijnanam (Fundamental Principles of Ayurveda and Quantum Mechanics)
3	AyUG KS	Kriya Sharir (Human Physiology)
4	AyUG-RS	Rachana Sharir (Human Anatomy)
5	AyUG-SA1	Samhita Adhyayan 1

Course code: is an abbreviation of selected alphabets given to the course (subject).

Name of the course: Complete name of the course is indicted in the table in each course.

Next table explains Course learning outcomes (CO) and they are matched with Programme learning outcomes.(PO)

Table 1- Course learning Outcome and matched Program learning outcomes.

SR1 CO No	A1 Course learning Outcome (CO) AyUG-…..: At the end of the course AyUG-…..: the student should be able to-	B1 Course learning Outcome matched with program learning outcomes.

SR1: Course learning Outcome are numbered in column SR1. CO<Number> for the AyUG-…..: These number will be used in the table 3 in column A3.

A1: Course Learning Outcome (CO) :

Course Learning outcomes (CO) is a detailed description of, what a student must be able to do at the completion of a course. CO helps the learner to understand the reason for pursuing the course. Learner can visualize the learning (it may be knowledge, Skills or attitude) at the end of the course.

Learning outcome is measurable and involves the structuring of two parts, a verb and an object. The verb phrase describes the intended cognitive process or what the learner is intended to do, and the object phrase describes the knowledge students are expected to acquire or construct.

B1: **Program learning Outcomes (POs)** matched with **Course learning outcomes (CO)**

Ayurvedacharya (BAMS) is a programme and outcomes for this are explained in earlier section. This column explains CO in column A1 matched with the appropriate PO<number> written in row in front of COs

Table 2: Contents of the Course-

	A2 List of Topics AyUG-PV I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

Table 2 explains contents of course. List of topics and distribution according to term and marks.

	A2 List of Topics AyUG-…..	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

A2: List of topics AyUG-…..: List of the topics (main and subtopics) those are included in the course.

	A2 List of Topics AyUG-…..	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

B2: Term – The course is of three terms of six months each. Topics in A2 are to be covered in three terms. This column indicates topics to be covered as per each term. Indicated by I, II, III.

	A2 List of Topics AyUG..	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

C2: Marks: This column indicates distribution of marks for the topic or group of topics in the course. Useful for considering the weightage of the topic in the course.

Term wise distribution is indicated in column B2 and marks distribution in C2.

	A2 List of Topics AyUG___	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

D2 and E2 : Lecture and Non Lecture Hours:- Defines the Total number of hours allotted for the course. As per MSE, they are divided in lecture and non-lecture hours.

	A2 List of Topics AyUG…	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

D 2 **Lecture hours:** Lecture is an exposition of a given subject or discourse on a particular subject delivered before an audience or class. Lecture is commonest method used in the classroom for teaching. Now it is supplemented with A/V aids. Expectations from the lecture are interactive lectures.

Interactive teaching method is a teaching process which is conducted through the interaction between the teacher and the learner. It is within the existing learning conditions, aiming to transfer common knowledge, skills, and values to the student.

These can be brief segments within a larger lecture-based class and can include a single or mix of several different Teaching learning and student engaging techniques. Total number of hours required to complete the topic are indicated in the column.

	A2 List of Topics AyUG…	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

E2 Non Lecture Hours:- Practical-Learning means knowledge gained by implementing theory in real-life activities. This way of learning helps students to remember the topic for a long time and also to master it. Practical-learning makes the study more enjoyable, with the highest engagement in the topic.

Learning can be with various ways. Based on objectives like Disseminate knowledge, Develop capability to use ideas, to test ideas, to generate ideas, Facilitate the personal development of students, self directed learning.

Common methods like Reading, Handouts, Guest lectures, using library and other learning resources, Case studies, Work experience, Projects, Demonstrations, Group working, Simulations, Workshops, Discussion & debates, Essay writing, tutorials, Presentations, compilations, feedback on written work. Some others like Peer assessment, Research projects, Workshops on techniques of creative problem solving. Team based learning like Group working, Action learning, field work. Generating ideas with Lateral thinking, Brainstorming, Mind-mapping, Creative writing, drawing. Others like Problem solving, Experiential learning, Role play, Mentors, Reflective logs and diaries, independent study/ self-directed learning, Work placement, Portfolio development etc.

Activities based on relevance are expected as a part of learning experience. Time required for these activities along with different newer Teaching learning methods supported by various Audio visual aids can be considered as **non-lecture hours**. These hours are indicated as per topic list in this column.

Table 3: Learning objectives (Theory) of Course AyUG-…..:

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/Category	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

Table 3 Learning objectives of course AyUG-…..: contents. This table contains ten columns. This comprehensive table explains Topic and subtopic wise points in the table. Matched lecture and no lecture hours explained as per D2 and E2 columns. It also explains learning Objective of the topic, Domain and subdomain as per Blooms Taxonomy, level, appropriate Teaching learning Method, assessment method, type of assessment and Integration for teaching.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

A3 indicates Course learning outcome (CO): - CO are explained in Column A1. Topic list is explained in column A2. This column A3 explains relation of Topic in list and course outcome denoted corresponding CO number. One topic and Objectives for topic may contribute in one or more than one CO s. They are also denoted in this column.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

B3 **Learning Objectives:** - Learning objectives are clearly written, specific statements of observable learner behavior or action that can be measured upon completion of an educational activity. It is a description of what the learner must be able to do upon completion of an educational activity. A well-written learning objective outlines the knowledge, skills and/or attitude the learners will gain from the educational activity. One Topic covers one or many learning objectives. They are noted in Column B3. Each objective start with a verb. Before that line in the first cell "At the end of the session, the student should be able to" is common to all the statement.

A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

C3 indicates **Domain of learning.** Benjamin Bloom has identified three domains of educational activities. The three domains are Cognitive, psychomotor and affective. Cognitive is for mental skills (Knowledge), Psychomotor is for manual or physical skills (Skills) while Affective is for growth in feelings or emotional areas (Attitude), They are also indicated by KSA (Knowledge, Skills and Attitude). All activities related to teaching and learning are aligned to these domains of learning.

Cognitive domain involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. There are six major categories. They are in ascending order. Lowest level is Knowledge (Recall), followed by Comprehension, Application. Analysis, Synthesis and Evaluation in the pyramid. They starting from the simplest to the most complex.

Psychomotor domain includes physical movement, coordination, and use of the motor skill areas. Development of these skills requires practice and is measured in terms of speed, precision, procedures, or techniques in execution. The seven major categories listed in order are Perception, Set, Guided response, Mechanism, Complex Overt Response, Adaptation and Origination.

Affective domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The five major categories listed in order are: Receiving, Responding, Valuing, Organization and Internalizing values (characterization).

These are denoted in column C3 e.g., Cognitive/Knowledge.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

D3 : Considering the Course outcome, Learning objective, level of learner(UG/ PG etc), topics are classified into Must to know, Desirable to know and Nice to know. This classification is essential to focus depth of the teaching, allotted time and efforts in teaching. It reflects in Teaching learning Methods and assessment. Must know should be covered in depth, Desirable to know as an introduction and Nice to know should be a sensitization.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

E3 Levels of competencies in Clinical practice. It is based on Millar's Pyramid. It is divided in four levels. Lower two levels are Know and Know how based on Cognitive. Top two Shows and does for behavior. Lower three levels are useful in UG. In any topic based on the Domain and importance, Level, Teaching and learning activities as well as Assessment methods are planned. These levels for each objective in topic are noted in Column E3.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

F3 T – L Methods: - Teaching learning methods. Teaching learning methods are planned based on Topic need, Domain, Importance, Level to be assessed. This column indicates traditional methods like lecture as well as interactive methods.

Lecture method is an educational presentation delivered by an instructor to a group of students with the help of instructional aids and training devices. In lecture method, the teacher orally presents the course material in an organized way to the students. Lectures may contain varying level of student participation, and the students take notes. Lecturing is one of the oldest methods of teaching used by the teachers of higher education. Lecture method gives more importance to content presentation, where the teacher is active and the students are passive, but the monotony of

teaching will be overcomed by various methods of Interactivity and Audio-visual aids. It is fastest and easiest way of large group teaching. Lecture method helps to motivate, clarify doubt, review the understanding by verbal and nonverbal responses.

In lecture, various other methods can be included. A large classroom can be converted to small groups for

Discussions: - Leading discussions can be one of the most rewarding, and most challenging, teaching methods. Using discussions as a primary teaching method allows us to stimulate critical thinking. Large group can be converted to small groups and activity can be conducted.

Brainstorming is used as one of the teaching methods. the students participate by responding or presenting views on the topic. This technique encourages new ideas among students.

Inquiry-Based Learning starts from a place of questioning. Students may spontaneously ask questions or be prompted to ask questions about a particular topic. They might search to find answers, engage in activities that will help them pursue answers, or work collaboratively in pursuit of answers.

Problem-based learning (PBL) is a student-centered approach in which students learn about a subject by working in groups to solve an open-ended problem. This problem is what drives the motivation and the learning.

Case based learning: - Same as above. A case on clinical practice or any real-life situation.

Project-Based Learning: - Project-based learning requires students to spend an extended period of time (e.g., a week) on a single project. Students will complete project with Learning objective and will present in class.

Team-based learning (TBL) is a structured form of small-group learning that emphasizes student preparation out of class and application of knowledge in class

Flipped classroom: - Flipped classrooms involve asking students to complete the reading, preparation and introductory work at home. Video or presentations are supplied before the class. Then, during class time, the students will ask questions and participate in discussions.

Blended Learning Blended learning is a mix method. Classroom lecture and technology together. This method relies heavily on technology, with part of the instruction taking place online and part in the classroom via a more traditional approach, similar but different than flipped classroom approach. Various online tools, apps can be added in the classroom activities.

Edutainment: - A combination of education and entertainment. it helpful in maintaining students' interests, by using various methods of teaching such as videos, Power Point slides, demonstrations, discussions, etc.

Early Clinical Exposure (ECE) provides a clinical context and relevance to basic sciences learning. It also facilitates early involvement in the healthcare environment that serves as motivation and reference point for students, leading to their professional growth and development. It can be for healthy individuals or Patients. In a large classroom, it can be achieved by recorded videos, cases.

Simulation is also the pedagogical approach of providing students with the opportunity to practice learned skills in real-life situations. Simulation-based learning allows students to apply abstract concepts to active hands-on practice. Practicing with mock or real patients in a dedicated clinical environment such as a clinical skills lab helps students learn to make appropriate decisions at various points within the scenario.

Role plays: - Role play is the basis of all dramatic activity. Role playing is a way of working through a situation, a scenario, or a problem by assuming roles and practicing what to say and do in a safe setting. It is effective way of learning cognitive, affective as well as communication.

Self-directed learning is the process through which an individual takes responsibility for their learning. This includes assessing the needs and readiness for learning, identifying learning goals, engaging in the learning process and self-evaluation. As a part of learning students are needs to acquire many essential skills by this methos. Many online tools, E learning portals, MOOC's related to syllabus are available. As per importance of topics nice to know topics can be selected for this method.

Problem solving method: - Human beings face multi-dimensional problems in their lives, and they try to solve these problems in a particular way in the light of their previously gained knowledge and experiences. In this regard, it is essential for the students to be prepared for future or near future challenges by facing real life, or real like, problems in their learning environment, and finding appropriate solution of these problems. Many similar methods like Critical thinking, creative thinking can be part of this activity.

Kinesthetic Learning students perform hands-on physical activities rather than listening to lectures or watching demonstrations. Kinesthetic learning, values movement and creativity, is most commonly used types of instruction. Students are expected to do, make or create something. Poster making, model making, Chart making, Video Clip making. Many such activities can be part of learning.

Workshops on few topics for can be good Teaching method. Skills development, communication skills, ethics and many other programme outcomes can be achieved with this method.

Game-Based Learning Students love games, game-based learning, which requires students to be problem solvers as they work on quests to accomplish a specific goal. For students, this approach blends targeted learning objectives with the fun of earning points or badges, much like they would in a video game.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

G3 Assessments: This column indicates method of assessment for the given Topic. Various types of assessment methods are given as per domain. For assessment of cognitive domain MCQ, extended matching items, SAQ, LAQ, Essay writing, modified essay questions (MEQs), Constructed Response Questions (CRQs), case study, open book test etc. can be conducted.

In class activities like Quiz, Puzzles, Class Presentation, Debate, Word puzzle, Online quiz and online game-based assessment methods etc. Kinesthetic activities like Making of Model, Charts, Posters, conducting interview, Interactions, Presentations, similarly Critical reading papers, Creativity Writing etc. are useful to assess current understanding and giving feedback.

Clinical or practical related video cases, simulated patients, patient management problems, checklists, Objective Structured Clinical examination (OSCE), OSPE, Mini-Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedural Skills (DOPS), simulation, Clinical work sampling (CWS) can be recorded as formative assessment. Involving activities like student projects, short survey, research projects, can be used. Other Teaching Methods indicated in the column like PBL, CBL etc. can be used as formative assessment with rating scales, checklist and pre decided scoring pattern. Record keeping like compilations, portfolios, log book, trainer's report, self-assessment, peer assessment, and 360-degree evaluation can be scored for few marks as Formative assessment.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

H3 Formative and summative assessment: Column indicate assessment indicated in G3 should be performed as Formative and summative assessment. Few topics are indicated for formative assessment only. Most of the topics will be for formative as well as summative assessment.

I3 Term wise distribution is again indicated in column.

J3 Integration: - Students learn similar topics in more than one course(subjects). Integration of such topics, concepts, where various subject-based knowledge or aspects of one theme or topic are assimilated to provide the holistic approach. Many departments can come together to provide such holistic experience for similar topic. Horizontal and vertical integration opportunities are indicated in this column.

Table 4: Learning objectives (Practical) of Course <course code>

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/ sub	D4 Must to know/ desirable to know/Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

Similar to above table 3 for practical

- List of Practical is added to denote the practicals.

Table 5- Non-Lecture Activities Course AyUG….

Sr No	List non lecture Teaching-Learning methods	No of Activities

Table 5 summaries Non-Lecture Activities. These are indicative and as per the topic need, amongst the multiple methods denoted here and in the objectives table appropriate activities should be chosen.

Table 6: Assessment Summary: Assessment is subdivided in A to H points.

6 A-Number of Papers and Marks Distribution

Number of Papers and Marks Distribution for First Professional BAMS Subjects

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical /Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-SN & AI	2	200	-	75*	10 (Set-FA)	15	100	300
2.	AyUG-PV	2	200	100	60	10 (Set-FB)	30	200	400
3.	AyUG-KS	2	200	100	70	-	30	200	400
4.	AyUG-RS	2	200	100	70	-	30	200	400
5.	AyUG-SA1	1	100	-	75	10 (Set-FC)	15	100	200
GRAND TOTAL									**1700**

*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa

(Set-FA, FB, FC – sets of Electives for First Professional BAMS)

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

Theory i.e. Written by the MCQ, SAQ, LAQ as per MSE and Practical Examination by Practical / Clinical/ Viva.

Formative assessment as, it is assessment for learning, various other methods can be used. Considering cognitive, psychomotor and affective domain appropriate method as per column G3, appropriate method should be adopted.

(Refer above explanation of Formative assessment in G3 column)

Formative assessment should be frequent activity after teaching.

Records should be kept and cumulative marks should be forwarded to university as per table

Formative assessment is defined by two terms, Periodic Assessment and term test.

Periodic Assessment and Term Test - In table 6 C method for calculation of internal assessment marks is explained. Various periodic assessment methods are explained in the table 6 D.

6 C - Calculation Method for Internal assessment Marks (15 Marks)

For Sanskrit and Samhita Adhyayan 1

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.							

OR

6 C - Calculation Method for Internal assessment Marks (30 Marks)

For Kriya Sharir, Rachana Sharir and Padartha Vijnana

TERM	PERIODICAL ASSESSMENT*					TERM TEST **	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses							

	*Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

A detailed list of periodic assessment is given in this table. Chose one activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3 or any other as per objectives from this table. Conduct periodic test for 15 marks.

6 E Question Paper Pattern

I PROFESSIONAL BAMS EXAMINATIONS
AyuUG - ……
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II (If applicable).

ncism
प्राणाभिसर: प्राणायतनानाम्

6 F Distribution of theory examination

				D Type of Questions “Yes” can be asked. “No” should not be asked.		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**

Question paper Blue print is indicated as per Term, maximum marks allotted to topic and type of Questions.

A indicate List and name of topic and subtopic

B indicate Term

C indicate maximum marks allotted for topic or group of Topics.

D Distribution of type of question MCQ, SAQ, LAQ to be asked. “Yes” indicate can be asked. “No” indicate should not be asked.

6 G Blue print of paper I & II

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	Multiple choice Questions (MCQ) 20 Questions 1 mark each All compulsory	1. Topic number 2. Topic number 3. Topic number 4. Topic number 5. Topic number 6. Topic number 7. Topic number 8. Topic number 9. Topic number 10. Topic number 11. Topic number 12. Topic number 13. Topic number 14. Topic number 15. Topic number 16. Topic number 17. Topic number 18. Topic number 19. Topic number 20. Topic number
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory	1. Topic number / Topic number 2. Topic number / Topic number 3. Topic number / Topic number 4. Topic number / Topic number 5. Topic number / Topic number 6. Topic number / Topic number 7. Topic number / Topic number
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory	1. Topic number / Topic number 2. Topic number / Topic number 3. Topic number / Topic number 4. Topic number / Topic number

6 G - Blue printing of paper: - Based on 6 F should be used for framing question paper.

A indicates Sr No question

B indicates Type of Questions.

C indicates Topic number from which question is to be framed.

All questions should be compulsory.

For Q 1 MCQ 20 questions to be framed based on the topics indicated in column C. Must to know part 15 MCQ, Desirable to know 3 MCQ, Nice to know 2 MCQs.

For Q 2 SAQ 8 questions to be framed based on the topics indicated in column C. 7 Questions from Must to know 1 Question on Desirable to know and no Questions on Nice to know

For LAQ 4 questions to be framed based on the topics indicated in column C All questions on must know. No Questions on Nice to know and Desirable to know.

Structured Questions should be asked for LAQ. A clear demarcation of the should be given.

A balance of question assessing Knowledge, Comprehension, Application and Analysis should be maintained.

6 H Distribution of Practical Exam

SN	Heads	Marks
1	Practical (Total Marks 100)	
	Heading 1	
	Heading 2	
	Heading 3	
	Heading 4	
2	Viva Voce	
3	Internal	
4	Electives (if applicable))	
	Total Marks	

6 H indicates Marks Distribution as per various heads. Practical, Viva. Internal assessment marks(IA) and Electives (If Applicable).

7. References books/ Resources

Book and Resources are given.

Implementation

- Select a topic as per term
- Read the objectives
- Think of Domain
- Decide lecture plan and prepare material A/V aids(PPT, Charts etc)
- Decide non lecture activities to be conducted. Prepare resources (Case, problem etc)

- Decide assessment method (formative) and prepare material if required (e.g. Quiz, puzzle, etc)
- Make lesson plan. (Template next page)
- Conduct session/practical

LESSON PLAN TEMPLATE

List of Learning Resources : (Textbook, e – resources, other)
Referenced according to Vancouver style

Name of College:			
Name of Department (s)			
Name of Course Academic Year Batch –			
Learning Objectives:			
Instructional Method (Circle as appropriate) - Lecture /Seminar /Tutorial / Bedside Clinic / OPD Session / Community Visit / Hospital visit, any ot			
Duration - LH- NLH			
Time	Activity Description	Resources/ A-V Aids	Assessment Method / s

ncism
प्राणाभिसरः प्राणायतनानाम्

Contributions:

Curriculum reforms committee by CCIM.

- **Vaidya Jayant Deopujari,**

  Chairman BOG, Pratap Nagar, Nagpur, Maharashtra-440010.

- **Prof. Tanuja Manoj Nesari,** (Syllabus committee coordinator)
  Director, All India Institute of Ayurveda, Sarita Vihar, New Delhi.
- **Prof. Sanjeev Sharma,** (Syllabus committee coordinator)
  Director, National Institute of Ayurveda, Jaipur, Rajasthan.
- **Vaidya Vinod Kumar T.G. Nair,** 86, Nirjhari, PTP Nagar, Thiruvananthapuram-695038, Kerala.
- **Vaidya Rakesh Pandit,** Shiv Nagar, MEHLI, Shimla-171013, Himachal Pradesh.
- **Prof. Haridra Dave,** Professor, J.S. Ayurved Mahavidyalaya, Nadiad, Gujarat.
- **Prof. Kamlesh Kumar Dwivedi,** Samne Ghat, Lanka, Varanasi –221005. U.P.
- **Prof. Asim Ali Khan,** D-194, Abul Fazal Enclave, Jamia Nagar, New Delhi-110025.
- **Prof. Mohammed Abdul Waheed,** Tilak Nagar Amber Pet Road, Hyderabad-500013, Telangana.
- **Prof. R. Meena Kumari,** Arumbakkam, Chennai-600106, Tamil Nadu.

Mentors for Health Sciences Education Technology and Online Training.

- **Dr Payal Bansal**, Director, CPE and Faculty Development, Dr.D.Y.Patil Vidyapeeth, Pune
- **Dr Nirmala Rege**, Professor Seth GS Medical college and KEM Hospital Mumbai
- **Dr Mohan R Joshi**, Tilak Ayurved Mahavidyalaya, Pune

Committee AyUG SN Sanskrit

1. **Ramadas P V**, (Chairman) Professor Sanskrit, Amrita school of Ayurveda, Kollam, Kerala
2. **Dr. Vilobh Bharatiya**, (Co-ordinator) Assi Professor Sanskrit, Vidarbh Ayurved College, Amaravati
3. **Dr. S. Venugopalan**, Professor, SCSVMV, Enathur, Kanchipuram
4. **Sanjeeva Krishna Hegade**, Reader, Sushrutha Ayurvedic Medical College & Hospital, Bangalore
5. **Sambhu Potty V**, Asst. Professor in Sanskrit, Govt. Ayu College, Tripunithura, Ernakulam, Kerala
6. **Dr. V Kalpana**, Asst. Prof. Sanskrit, S.V. Ayurvedic College, T.T.D., Tirupati
7. **Dr. Devan. E. M**, Assistant professor, Government Sanskrit college, Thiruvananthapuram, Kerala
8. **Prof, Parameshwar G Bhat**, N K Jabshetty Ayurveda college & P G centre, Bidar. Karnataka
9. **Dr. Lekshmi.M.S** , PG Scholar, Govt. Ayurved College, Thiru
10. **Vysakh S,** PG Scholar, KVG Ayurvedic Medical College and Hospital,
11. **Dr. Madhura Kulkarni,** (Facilitators)Assi. Professor Sanskrit, Tilak Ayurved Mahavidyalaya, Pune
12. **Dr. Nilesh Kulkarni**, (Facilitators) Sumatibai Shah Ayurved Mahavidyalaya, Hadapsar, Pune

Subject code - AyUG PV Padartha Vidnyana and AyUG -SNAI Ayurved Itihas

1. **Vd. Kirathamoorthy. P P**, (Chairman) Professor, VPSV AVC, Kottakkal
2. **Dr. Anand Katti**, (Co-ordinator) Asso. Professor, Govt. Ayurveda Medical college, Bengaluru
3. **Dr. Mohan R. Joshi**, Professor, Tilak Ayurved Mahavidyalaya, Pune
4. **Dr. Raja Rajeshwari**, Professor, SDM College of Ayurveda and Hospital, Hassan
5 **Vd. Dipali Shukla**, Associate Professor, Govt. Akhandanand Ayurved College, Ahmedabad
6. **Vd. Pankaj Pathak**, Associate Professor, All India Institute of Ayurveda, New Delhi
7. **Dr. Nagaraj Naik Chavhan**, Assi. Professor, SDMAMCH, Gadag
8. **Vd. Pratik Mehta**, PG Scholar, Tilak Ayurved Mahavidyalaya, Pune
9. **Vd. Preetpal Singh**, PG Scholar, IPGT & RA, Jamnagar
10 **Dr. Madhumati Nawkar**, (Facilitators) Asso. Professor, R T Ayurved Mahavidyalaya, Akola
11. **Dr. Manojkumar Chaudhari**, (Facilitators)Assi. Professor, Ashtang Ay. Mahavidyalaya, Pune

Subject code - AyUG KS Kriya Sharir

1. **Dr Kalpana Sathe**,(Chairman) Professor, Sumatibhai Shah Ayurved Mahavidyalaya, Pune
2. **Dr Devendra Khurana**,(Co-ordinator) Principal, Shri Krishna Rajkiya AM, Kurukshetra.
3. **Dr Kavita Indapurkar**, Professor, Bharati Vidyapeeth Deemed University Ayurved college, Pune
4. **Dr Deepa Kale**, Asst. Professor.
5. **Dr. Puja Sharma**, Asst. Professor, Shiva Ayurved Medical College, Bilaspur, Himachal Pradesh
6. **Dr Kishorilal Sharma**, Asso. Professor, Madan Mohan Malviya Rajakiya AM, Udaypur, Rajasthan.

7. **Dr Prem Chand Mangal,** Professor, Shri Krishna Rajkiya AM, Kurukshetra Hariyana
8. **Dr. Vipin Pandey**, PG Scholar,
9. **Dr. Sayalee S. Videkar**, PG Scholar, R.A. Podar Medical Ayurved College, Mumbai
10. **Dr Kiran Tawalare**(Facilitators), Asst. Professor, Shri Ayurved College, Nagpur, Maharashtra
11. **Dr. Kishor Patwardhan,** (Facilitators), Professor, BHU, Varanasi

Subject code - AyUG RS Rachana Sharir

1. **Dr. M. Dinkar Sarma**(Chairperson), Professor, H. No: 12-6-2/248, Vivek Nagar, Ku
2. Dr. Sunil Kumar Yadav(Coordinator), Professor, National Institute of Ayurveda, Jaipur
3. Dr. Saroj Vinay Patil, Professor, Tilak Ayurved Mahavidyalaya, Pune
4. **Dr. Pranab Jyoti Vashya**, Professor, Government Ayurvedic College, Jalu
5. **Dr. Kameshwar Nath Singh**, Professor, Faculty of Ayurveda Institute of Medicine
6. **Dr. Satish Vats, Professor**, Shri Krishna Rajkiya Ayurved Mahavidyalaya, Kurukshetra Hariyana
7. **Dr. Upender Nath Sharma**, Associate Professor, Ayurvedic College Hospital, Paprola
8. Dr.B.G. Kulkarni, Professor, Parul Institute of Ayurved, PO. Limda, Ta. Waghodia, Vadodara
9. Dr.Amit Kumar Sharma, Professor, Ayurved & Unani Tibbia College, Karol Bagh , Delhi
10. **Dr.Isha Harshwani**, Ph.D. Scholar, National Institute of Ayurveda, Jaipur.
11. **Dr. Simi C P**, PG Scholar, SDM College of Ayurveda and Hospital, Hassan
12 **Dr Priti Desai**,(Facilitators)Professor, MGACH&RC, Wardha. Maharashtra
13 **Dr Gaurav Sawarkar**(Facilitators)Associate Professor, MGACH&RC, Wardha. Maharashtra

Subject code - AyUG SA – 1 Samhita Adhyayana – 1

1. **Prof. A S Baghel** (Chairman), Professor, I.P.G.T & R.A. Jamnagar, Gujrat
2. **Dr.Vasudeva A Chate** (Co-ordinator), Asso. Professor, GAMC&H, Mysore
3. **Dr.Shreevathsa**, Professor, Govt. Ayurveda Medical College, Mysore
4. **Dr.S. Swaminathan**, Professor, Sri Jayendra Sarswathi Ayurveda College, Chennai
5. **Dr.Ritesh Gujarati**, Associate Professor, GJP-IASR, Anand, Gujrat
6**. Dr. Abhijit Saraf** , Asso. Professor, Saptashrungi Ayurved Mahavidyalaya & Hospital, Nashik
7. **Dr. Jayalakshmy T R**, Assi. Professor, Ashtamgam Ayurveda Chikisalyam, Palakkad
8. **Dr.Sharad Kumar M**, PG Student, SDM college of Ayurveda, Hassan
9. **Dr. Sarvesh Sharma,** PG Scholar, R.A. Podar Ayurved Medical College, Mumbai
10**. Dr Priya Naik** (Facilitator), Assistant Professor, R. A. Podar Ayurved Mahavidyalaya, Mumbai
11. **Dr.Vaishali Mali**, (Facilitator), Assi Professor, Ch. Bramh Prakash Ayu. Charak Sansthan, Delhi

Curriculum Committee

Vaidya Jayant Deopujari,
Chairman,
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

Dr BS Prasad
President,
BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

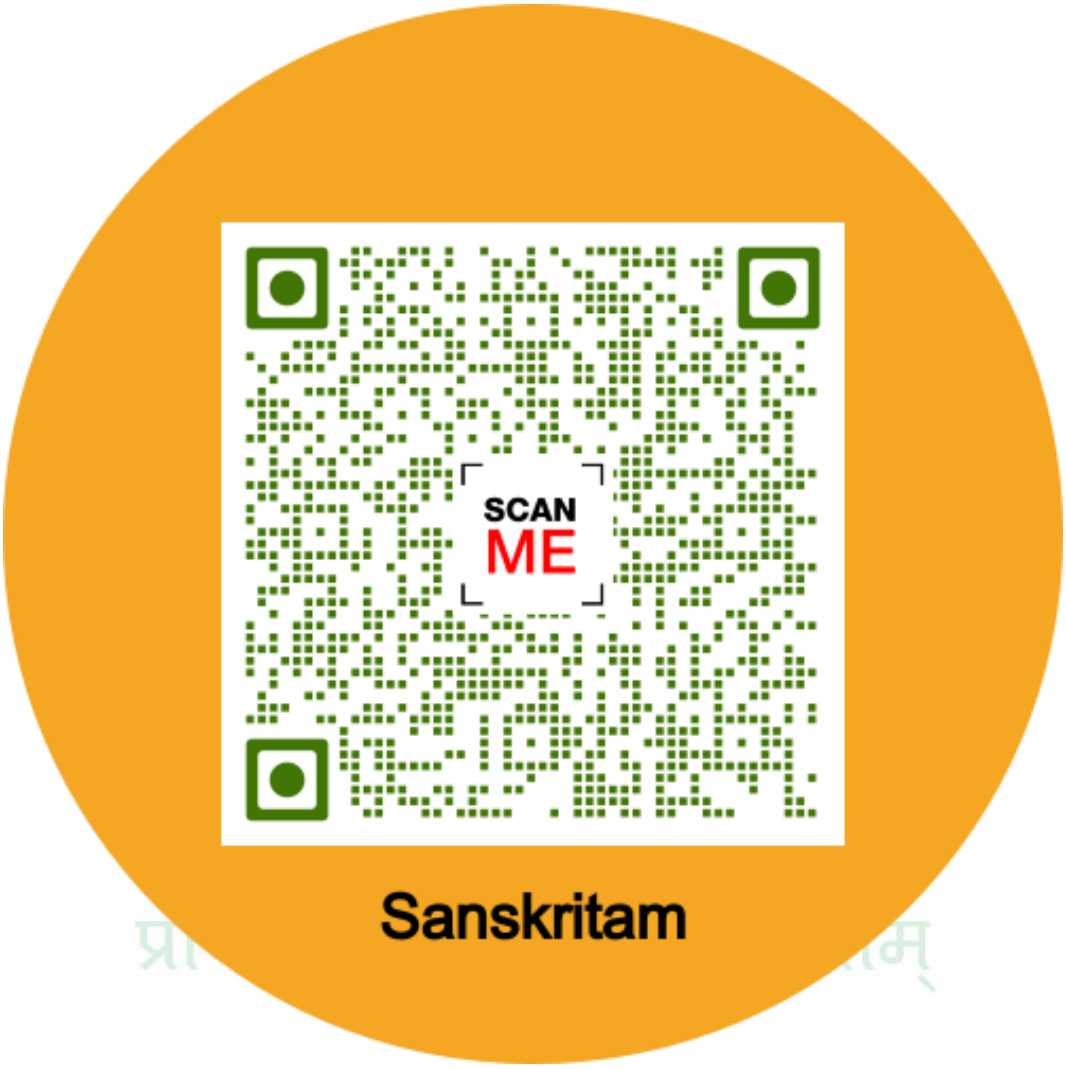
Coordinator, Curriculum committee	**Dr Mohan R Joshi**, Tilak Ayurved Mahavidyalaya, Pune
Subject Coordinators- I BAMS	
Sanskrit	**Dr. Madhura Kulkarni,** Assistant Professor Sanskrit, Tilak Ayurved Mahavidyalaya, Pune
Padartha Vijnana	**Dr. Madhumati Nawkar,** Assistant Professor, R T Ayurved Mahavidyalaya, Akola
Kriya Sharira	**Dr Kiran Tawalare,** Assistant Professor, Shri Ayurved College, Nagpur, Maharashtra
Rachana Sharira	**Dr. Gaurav Sawarkar,** Associate Professor, Mahatma Gandhi Ayurved College Hospital & Research Centre, Wardha, Maharashtra.
Samhita Adhyayan 1	**Dr. Vaishali Mali**, Assistant Professor, Ch. Bramh Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi

SAMSKRITAM EVAM AYURVED ITHIHAS

(SUBJECT CODE-AyUG-SN & AI)`

SANSKRIT AND HISTORY OF AYURVEDA

(Applicable from 2021-22 batch onwards for 5 years or
until further notification by NCISM, whichever is earlier)



PADARTHA VIJNANAM

(SUBJECT CODE- AyUG-PV)

FUNDAMENTAL PRINCIPLES OF AYURVEDA AND QUANTUM MECHANICS

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

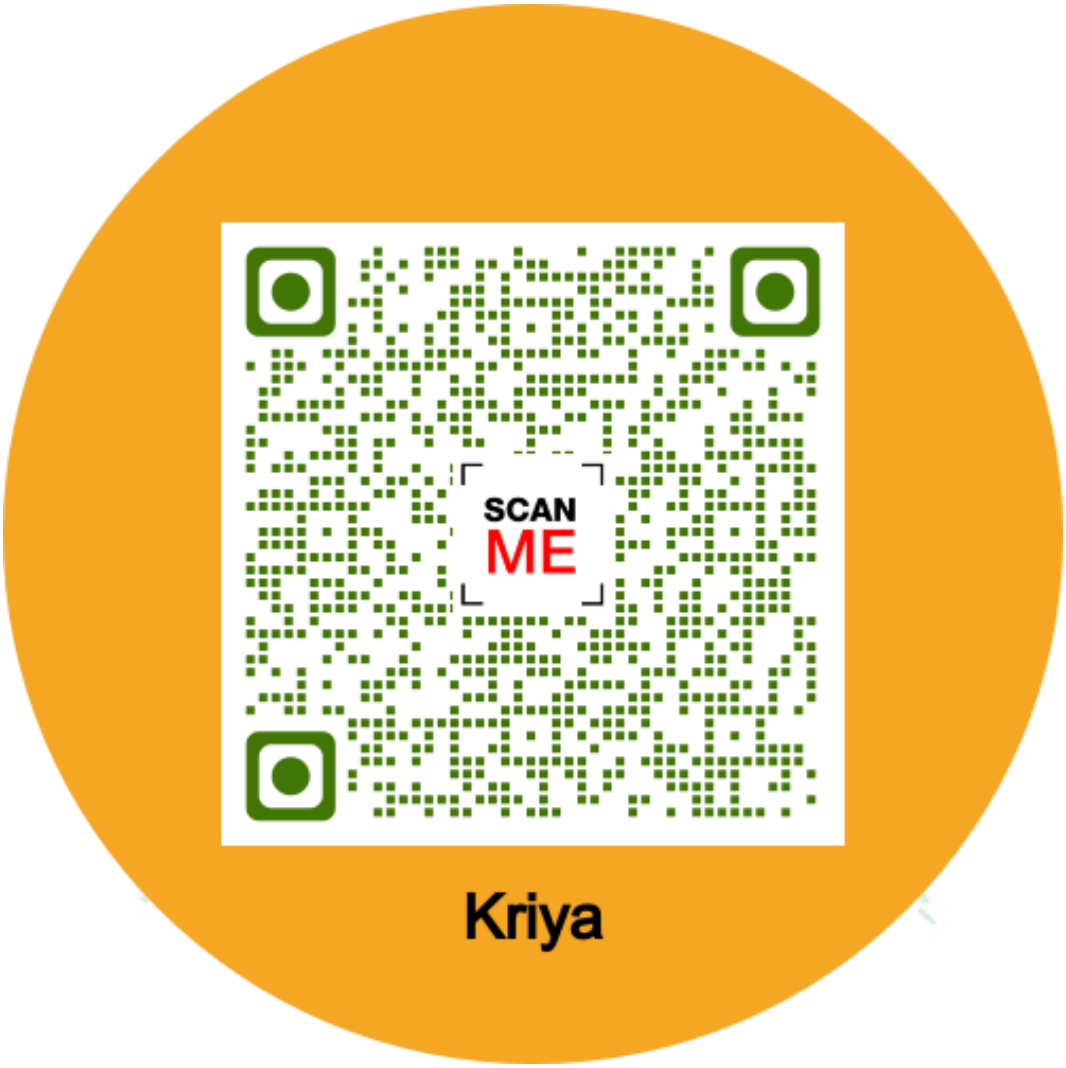


KRIYA SHARIRA

(SUBJECT CODE- AyUG-KS)

HUMAN PHYSIOLOGY

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

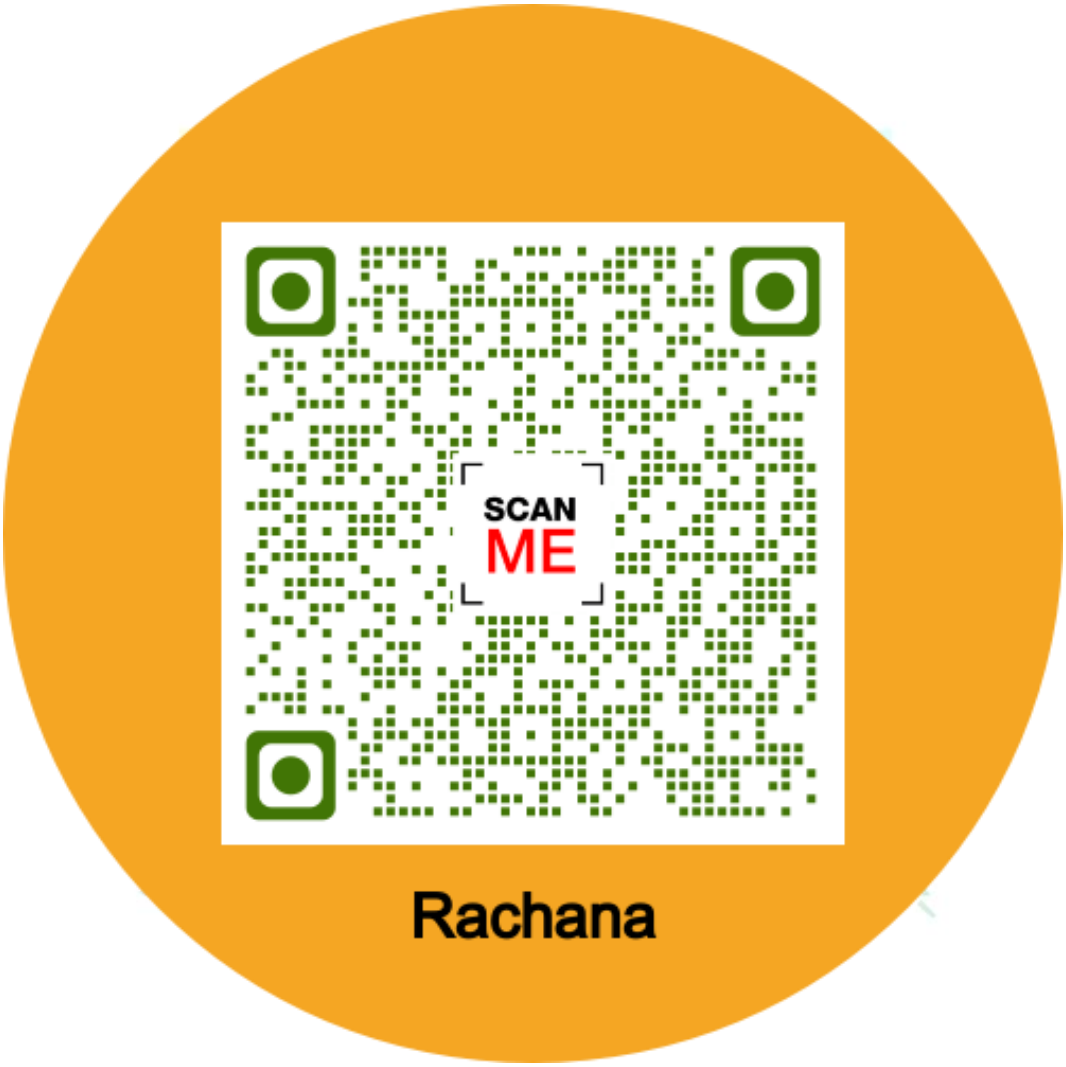


RACHANA SHARIRA

(SUBJECT CODE- AyUG-RS)

HUMAN ANATOMY

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

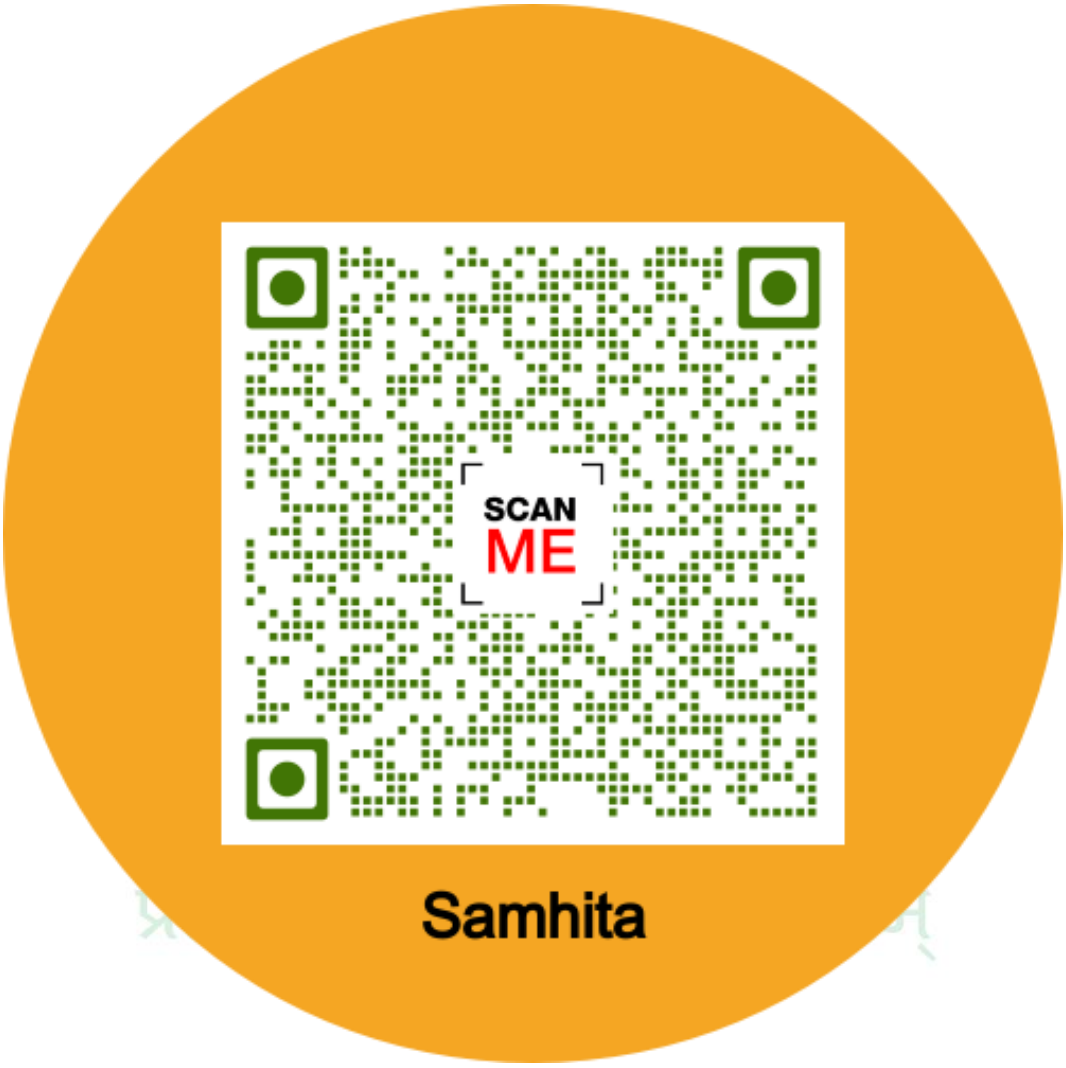


SAMHITA ADHYAYAN-1

(SUBJECT CODE- AyUG-SA1)

STUDY OF AYURVEDA CLASSICAL TEXT

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)



USER MANUAL
FOR
SECOND PROFESSIONAL BAMS CURRICULUM



(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

॥ आयुषे सर्वलोकानाम् ॥

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME

User Manual II BAMS

National Commission for Indian System of Medicine

The National Commission for Indian System of Medicine is the statutory body constituted under NCISM Act, 2020 vide gazette notification extraordinary part (ii) section (i) dated 21.09.2020.

An Act..

- to provide for a medical education system that improves access to quality and affordable medical education, ensures availability of adequate and high quality medical professionals of Indian System of Medicine in all parts of the country;
- that promotes equitable and universal healthcare that encourages community health perspective and makes services of such medical professionals accessible and affordable to all the citizens;
- that promotes national health goals;
- that encourages such medical professionals to adopt latest medical research in their work and to contribute to research;
- that has an objective periodic and transparent assessment of medical institutions and facilitates maintenance of a medical register of Indian System of Medicine.
- for India and enforces high ethical standards in all aspects of medical services;
- that is flexible to adapt to the changing needs and has an effective grievance redressal mechanism and for matters connected therewith or incidental thereto

वैद्य जयन्त देवपुजारी
अध्यक्ष
VAIDYA JAYANT DEOPUJARI
Chairman

ncism
॥ आयुषे सर्वलोकानाम् ॥

भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
आयुष मंत्रालय, भारत सरकार
National Commission for Indian System of Medicine
Ministry of Ayush, Govt. of India

Ref No. 20/04/2021-NCISM

Dated- 09/08/2023

FOREWARD

Ayurveda is eternal because it always remained contemporary. Ayurveda taught us to live by the present time. Ayurveda in general & Ayurveda education in particular witnessed many changes right from its terrestrial form to small gurukulas to big universities like Nalanda, Takshashila to again decentralized small gurukulas after the destruction of these universities. During colonial rule it was again shifted to Sanskrit colleges & again after independence, since 1970, in the present form of university & college education.

Ayurveda education also have a long history of change in curriculum. Vagbhata was the first who changed the curriculum by changing the sequence of the Sthanas & now we are in the era of competency-based curriculum. This will again change in future with horizontal model of teaching. We must keep ourselves ready to be attuned with the time & the subsequent change.

The present syllabus structure is student centric. There is an emphasis on activity-based learning. It is designed to improve the competency level of our students. The enormous efforts taken by the syllabus framing committee are clearly visible in this document. I congratulate the team for the same.

On behalf of the commission I request all faculties to give a serious reading to this document, discuss with your colleagues, understand the contents & implement for the benefit of your students. No need to mention here, your feedbacks are very much valuable for us.

Vaidya Jayant Deopujari

कार्यालय: 61-65, संस्थानिक क्षेत्र, जनकपुरी, डी-ब्लाक नई दिल्ली - 110058 / Office: 61-65, Institutional Area, Janakpuri, D-Block, New Delhi - 110085
दूरभाष/Phone:- अध्यक्ष/Chairman, कार्यालय/Office, पंजीयन/Registration, फैक्स/Fax, 28525156, 28525464, 28522519, 28520578, www.ncismindia.org, chairman@ncismindia.org

डॉ. श्रीनिवास प्रसाद बूदूरु
अध्यक्ष, आयुर्वेद बोर्ड
Dr. Sreenivasa Prasad Buduru
President, Board of Ayurveda



भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग
आयुष मंत्रालय, भारत सरकार
National Commission for Indian System of Medicine
Ministry of Ayush, Govt. of India

D.O. No. 9-E/President.BOA/2023 **Dated.-09.08.2023**

"FOREWORD"

NCISM since its establishment (11th June 2021) marching ahead to bring revolutionary changes that are appropriate to the present context and the future. For valuable inputs stakeholders' consultation in the form of survey, thought experiment as well as meetings were conducted. By all means, NCISM started working by aiming at 2030 and to align with NEP 2020. Accordingly, the MSE-2022 (Minimum Standards of Undergraduate Ayurveda Education Regulations-2022) several initiatives such as reversal of teaching hours of theory and practical from 2:1 to 1:2; introduced concept of non-lecture hours; incorporated advance teaching as well as assessment methods. There is standstill situation concerned to advancement in Ayurveda Science. To update Ayurveda with scientific advancements and to remove the outdated content a mechanism has been developed. For inter-disciplinary approach NCISM introduced online elective courses and for overall development of students sports as well as recreational periods are also specified to add in time table.

Ultimately the syllabus that is used to teach and train the students plays a major role in achieving the objective of the course. The objective of BAMS program is to produce efficient and skilful clinicians. Keeping this in the background and looking at the requirements of 2030 NCISM introduced CBME/ OBME (Competency Based Medical Education/Outcome Based Medical Education). Maximum care has been taken to ensure that the *'Learning Objectives'* that are required to become a successful clinician are all included in the syllabus with appropriate weightage in teaching hours as well as in assessment. Second professional subjects being the linking subjects between foundational subjects of first profession and clinical subjects of final profession enough care has been taken care in developing the syllabus of second professional subjects. As indicated by NEP-2020, to ignite *'Critical Thinking'* among students of ayurveda project based as well as various activity-based learning are introduced in the syllabus. *'Punarukti*

Dosha' is one of the major defects in syllabus of Ayurveda subjects which has been taken care in this syllabus and also identified the common areas for integrated teaching between departments.

Assessment is another major issue in education. Conducting objective oriented examination and to maintain uniformity in examining all students is a big challenge. To address both the issues, blue print of the questions and weightage and structure of practical/clinical as well as viva-voce examination also clearly defined in the present syllabus.

My sincere thanks to the members of advisory committee, core committee and chairman and expert members of all subject committees for their valuable inputs and efforts in shaping this syllabus.

I am sure and confident that this syllabus will lay down definite path that will lead into the production of knowledgeable and skilful clinical practitioners of Ayurveda. This is my sincere request to teachers is to understand the objectivity of the subject and to put forth maximum efforts to achieve the same. I also would like to request the heads of the institutions for the preparation of dynamic time tables so that various activities specified in the syllabus may be accommodated and conducted comfortably.

Dr. B.S. Prasad
President, Board of Ayurveda
National Commission for Indian System of Medicine, New Delhi

कार्यालय: 61-65, संस्थानिक क्षेत्र, जनकपुरी, डी-ब्लाक नई दिल्ली - 110058 / Office: 61-65, Institutional Area, Janakpuri, D-Block, New Delhi - 110085
दूरभाष/Phone:- 011-28522519, 28525156, 28525464, 28520878, www.ncismindia.org, President.boa@ncismindia.org

Prologue

Since 2021-22 admitted batch NCISM had accepted outcome based curriculum.

Outcome-based curriculum Outcome-based curriculum is an educational framework that centers around clearly defined learning outcomes or objectives. In this approach, the curriculum is designed and structured based on the desired knowledge, skills, and competencies that students should attain by the end of a course or program. Instead of focusing solely on content delivery, outcome-based curriculum emphasizes the demonstrable results of learning.

The process involves identifying specific learning outcomes, aligning instructional strategies and assessments to these outcomes, and continuously assessing students' progress and achievement. This approach enhances transparency, as both educators and students have a clear understanding of the intended learning goals. Outcome-based curriculum fosters active learning, critical thinking, and practical application of knowledge, better preparing students for real-world challenges. It also allows for continuous improvement by incorporating feedback and adapting the curriculum to meet evolving educational needs.

Outcome-Based Curriculum (OBC) is structured around the alignment of several key elements: General Abilities (GA), Program Learning Outcomes (PLO), and Course Learning Outcomes (CLO). Mapping these elements helps ensure a coherent and effective educational framework.

General Abilities (GA) encompass a set of skills and attributes that students should develop across their academic journey. These abilities often include critical thinking, communication, teamwork, ethical awareness, and more. They represent the overarching qualities that students should possess upon graduation.

Program Learning Outcomes (PLO) are specific statements that articulate what students should achieve by the time they complete a program of study. PLOs reflect the essential knowledge, skills, and competencies relevant to a particular field. They guide the curriculum design by outlining the program's intended outcomes.

Course Learning Outcomes (CLO) are detailed objectives for individual courses within the program. They break down the broader PLOs into specific, measurable

statements that define what students should be able to do after completing a particular course.

Mapping involves aligning GA, PLO, and CLO to ensure a seamless progression of learning. It ensures that each course's CLOs contribute to achieving the program's PLOs, and that both are in line with the development of GA. Mapping ensures that the curriculum is coherent, progressive, and that students are consistently building the desired skills and knowledge. This alignment aids in assessment and evaluation, as well as in demonstrating the effectiveness of the educational program in producing graduates with the intended abilities and outcomes.

Graduate Attributes: -

Ayurved Samhiats explain many attributes of Ayurved Physician. Charak Samhita has explained the Qualities of *Pranabhisar* Vaidya, (Saviour), *Chikitsaprabhrut, Vaidyavrutti* and many quotes from almost all chapters of samhita. Sushrut Samhitas has elaborate description of teaching learning process and qualities of Vaidya in many chapters e.g. Prabhashaneeya. similarly, Ashtang sangrah and Hridaya and other samhitas contributed many such quotes.

These are the graduate attributes compiled from samhitas. (A student after completion of the course, should gain these attributes.)

Graduate Attributes (GA) Sanskrit and English Translation	
GA1	स्वस्थातुरयोःकृते हेतुलिङ्गऔषधात्मकस्य त्रिसूत्रात्मकस्य आयुर्वेदस्य ज्ञाता (भवेत्) Ayurveda professional who is well versed with the Trisutra framework i.e. causes (Hetu), symptoms (Linga) and therapeutics (Aushadha) for the maintenance of health and management of disease
GA2	विविधगुरुशास्त्रसेवनादिभिः पर्यवदातता विशुध्द ज्ञानवत्ता बहुशो दृष्टकर्मता च Erudite scholar of pure knowledge of Ayurveda learnt from various gurus, contemporary disciplines and thorough observation of multiple procedures. (Variety of learning experiences.)
GA3	प्रकृतिवितर्कयुक्तिप्रतिपत्तिविद् (भवेत्) Physician with a rational approach to clinical decision making that is holistic and based on uniqueness of individual (Prakruti).

GA4	कर्म कुशल जितहस्ता च (भवेत्) Physician who is dexterous and skilled at performing therapeutic maneuvers.
GA5	विज्ञाता शासिता योक्ता चिकित्साप्रभृत: (प्राणाभिसर:) च (भवेत्) Saviour of lives, who is well equipped with requisite knowledge, leadership attributes and the ability to practice holistic management of diseases.
GA6	दक्ष: शुचि: सदवृत्तशील: करुणावान च (भूत्वा वर्तेत) Agile, wise, virtuous, ethical and compassionate professional physician.
GA7	सततांध्ययनपर: (भवेत्) Self-directed learner taking efforts to enrich his qualities (knowledge and skills) to improve healthcare and societal well-being.
GA8	सुष्ठु संभाषणक्षम: (स्यात्) Eloquent or good communicator who effectively communicates with patients, families, community and peers.
GA9	चिकित्सक अन्वेषक अध्यापक गुणानां ज्ञाता अभिकाक्षिण: च (भवेत्) Professional who knows the qualities of a practitioner, researcher and academician and aspires to be one.

Programme learning outcomes (PO)

At the end of the BAMS programme, the students will be able to:

PO1	Demonstrate comprehensive knowledge and application of the Trisutra concept to explore root causes, identify clinical manifestations of disease to treat ailments and maintain healthy status.

PO2	Demonstrate knowledge and skills in Ayurveda, acquired through integration of multidisciplinary perspectives and keen observation of clinical and practical experiences.
PO3	Demonstrate proficiency in holistic, unique assessment of an individual for rational approach and decision-making in management of disease and maintenance of health.
PO4	Perform procedures and therapeutic maneuvers with skill and dexterity in a variety of situations.
PO5	Demonstrate knowledge, skills and attitudes to provide holistic quality care and preparedness to practice.
PO6	Demonstrate agility, virtuous and ethical behavior and compassion to improve the well-being of individuals and society.
PO7	Demonstrate self-directedness in pursuit of knowledge and skills, which is required for advancing health care and wellbeing of society.
PO8	Demonstrate the ability to effectively communicate with patients, families, community and peers
PO9	Demonstrate an understanding of qualities and required skills as a practitioner, researcher and academician and an aspirations to become one.

GA1 to GA9 are Matched with PO1 to PO9 Respectively.

User Manual was I Ayurved was released with I curriculum in March 2022. II year curriculum includes new TL methods and New Assessment methods, User Manual for II BAMS is released with enhanced contents and customised for II year curriculum.

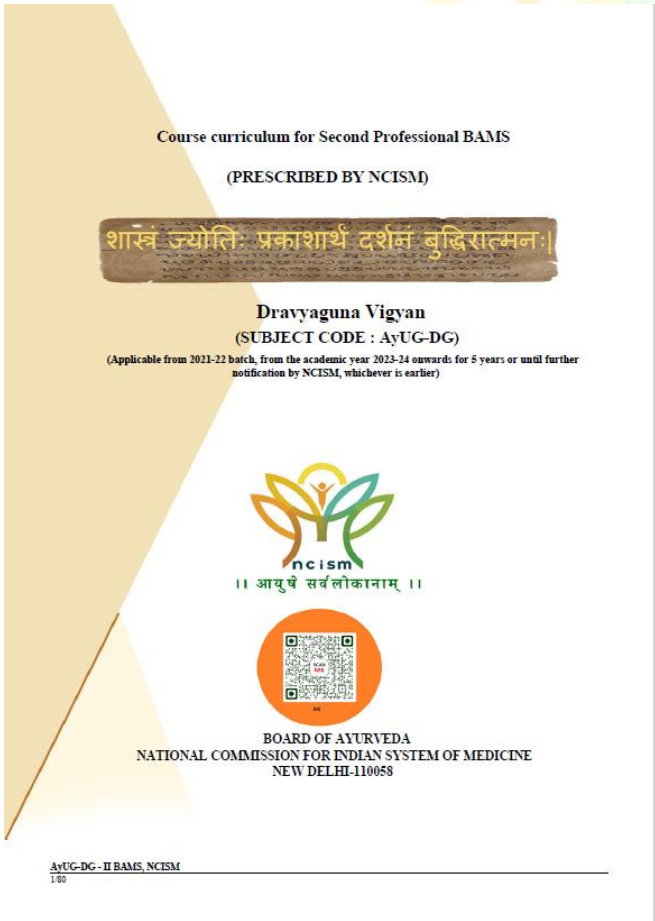
User manual II BAMS.

Welcome to the new curriculum of NCISM for II Professional BAMS (Ayurvedacharya). This introduction provides a preliminary overview before delving into the curriculum file for any specific course. These guidelines are designed to assist readers in navigating the document with ease. This document encompasses a range of terms, some of which may be familiar, while others might be less so. In this introduction, we offer explanations for several terms.

For those who have previously used this manual in I BAMS, you can expect to encounter new tables, explanations, and teaching and assessment methods specific to the second year. These additions will contribute fresh content to your understanding and usage of the manual. As you proceed through the curriculum, keep in mind the blend of familiar concepts and new information, all tailored to enhance your educational experience in II Professional BAMS.

First Page: Contains Name, Code, Year and "QR code" for downloading the document.

Second page is Summary page for the Course. The Page will provide at a glance information of Lecture and non-Lecture hours, Distribution of hours as per papers, Distribution of Marks (Theory and Practical).



Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)

शास्त्रं ज्योतिः प्रकाशार्थं दर्शनं बुद्धिरात्मनः।

Dravyaguna Vigyan

(SUBJECT CODE : AyUG-DG)

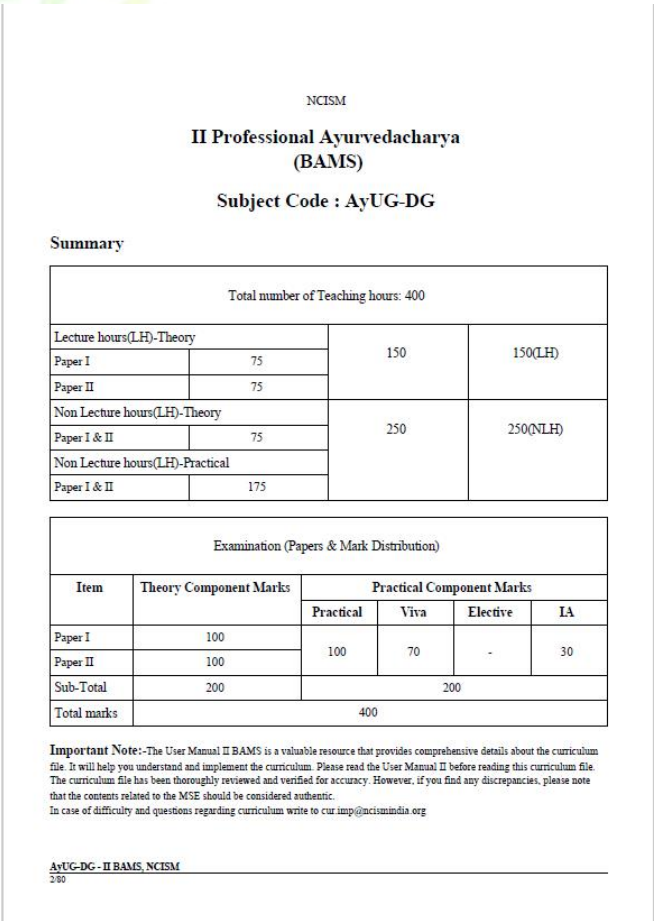
(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

AyUG-DG - II BAMS, NCISM
1/80



NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-DG

Summary

Total number of Teaching hours: 400			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(LH)-Theory		250	250(NLH)
Paper I & II	75		
Non Lecture hours(LH)-Practical			
Paper I & II	175		

Examination (Papers & Mark Distribution)					
Item	Theory Component Marks	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

AyUG-DG - II BAMS, NCISM
2/80

Next table is Index. All the major tables are indexed.

Curriculum: The curriculum is defined as the guideline of the academic content covered by an education system while undergoing a particular course or program. Curriculum has a wider scope which covers the knowledge, attitude, behaviour, manners, performance & skills that are imparted or inculcated in a student. It contains every aspect from objectives to assignments. This is outcome-based approach of the curriculum.

Graduate attributes reflect the particular quality and feature or characteristics of an individual, including the knowledge, skills, attitudes and values that are expected to be acquired by a graduate through studies at the higher education institution.

The graduate attributes include capabilities that help strengthen learners' abilities for widening current knowledge base and skills, gaining new knowledge and skills, undertaking future studies, performing well in a chosen career and playing a constructive role as a responsible citizen in the society.

Program learning Outcomes deal with the general aspect of graduation for a BAMS program, and the competencies and expertise a graduate will possess after completion of the program. Name of the Programme : Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery - BAMS)

As per new MSE, This programme (BAMS) is divided in three Professional years of 1.5 years each, followed by 1 year of internship. 2 professional BAMS has six courses (Subjects).

Course Code and Name of Course

Course code: is an abbreviation of selected alphabets given to the course (subject).

Name of the course: Complete name of the course is indicted in the table in each course.

Next table explains Course learning outcomes (CO) and they are matched with Programme learning outcomes.(PO)

Table 1- Course learning Outcome and mapped Program learning outcomes.

SR1 CO No	A1 Course learning Outcome (CO) AyUG-…..: At the end of the course AyUG-…..: the student should be able to-	B1 Course learning Outcome mapped with program learning outcomes.

SR1: Course learning Outcome are numbered in column SR1. CO<Number> for the AyUG-…..: These number will be used in the table 3 in column A3.

A1: Course Learning Outcome (CO) :

Course Learning outcomes (CO) is a detailed description of, what a student must be able to do at the completion of a course. CO helps the learner to understand the reason for pursuing the course. Learner can visualize the learning (it may be knowledge, Skills or attitude) at the end of the course.

Learning outcome is measurable and involves the structuring of two parts, a verb and an object.

The verb phrase describes the intended cognitive process or what the learner is intended to do, and the object phrase describes the knowledge students are expected to acquire or construct.

B1: **Program learning Outcomes (POs)** matched with **Course learning outcomes (CO)**

Ayurvedacharya (BAMS) is a programme and outcomes for this are explained in earlier section. This column explains CO in column A1 matched with the appropriate PO<number> written in row in front of COs

Table 2: Contents of the Course-

	A2 List of Topics AyUG-PV I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

Table 2 explains contents of course. List of topics and distribution according to term and marks.

	A2 List of Topics AyUG-…..	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

A2: List of topics AyUG-…..: List of the topics (main and subtopics) those are included in the course.

	A2 List of Topics AyUG-…..	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

B2: Term – The course is of three terms of six months each. Topics in A2 are to be covered in three terms. This column indicates topics to be covered as per each term. Indicated by I, II, III.

	A2 List of Topics AyUG..	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

C2: Marks: This column indicates distribution of marks for the topic or group of topics in the course. Useful for considering the weightage of the topic in the course.
Term wise distribution is indicated in column B2 and marks distribution in C2.

	A2 List of Topics AyUG___	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

D2 and E2 : Lecture and Non Lecture Hours:- Defines the Total number of hours allotted for the course. As per MSE, they are divided in lecture and non-lecture hours.

(Teaching Hours for Second Professional B.A.M.S. Subjects)

Sl.No.	Subject Code	Number of teaching hours		
		Lectures	Non-Lectures	Total
1.	AyUG-DG	150	250	400
2.	AyUG-RB	150	300	450
3.	AyUG-RN	150	300	450
4.	AyUG-AT	100	200	300
5.	AyUG-SA2	100	140	240
6.	AyUG-SW	150	250	400
Total		**800**	**1440**	**2240**

	A2 List of Topics AyUG…	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

D 2 **Lecture hours:** Lecture is an exposition of a given subject or discourse on a particular subject delivered before an audience or class. Lecture is commonest method used in the classroom for teaching. Now it is supplemented with A/V aids. Expectations from the lecture are interactive lectures. Interactive teaching method is a teaching process which is conducted through the interaction between the teacher and the learner. It is within the existing learning conditions, aiming to transfer common knowledge, skills, and values to the student.

These can be brief segments within a larger lecture-based class and can include a single or mix of several different Teaching learning and student engaging techniques. Total number of hours required to complete the topic are indicated in the column.

	A2 List of Topics AyUG…	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours

E2 Non Lecture Hours:- Practical-Learning means knowledge gained by implementing theory in real-life activities. This way of learning helps students to remember the topic for a long time and also to master it. Practical-learning makes the study more enjoyable, with the highest engagement in the topic.

Learning can be with various ways. Based on objectives like Disseminate knowledge, Develop capability to use ideas, to test ideas, to generate ideas, Facilitate the personal development of students, self directed learning.

Common methods like Reading, Handouts, Guest lectures, using library and other learning resources, Case studies, Work experience, Projects, Demonstrations, Group working, Simulations, Workshops, Discussion & debates, Essay writing, tutorials, Presentations, compilations, feedback on written work. Some others like Peer assessment, Research projects, Workshops on techniques of creative problem solving. Team based learning like Group working, Action learning, field work. Generating ideas with Lateral thinking, Brainstorming, Mind-mapping, Creative writing, drawing. Others like Problem solving, Experiential learning, Role play, Mentors, Reflective logs and diaries, independent study/ self-directed learning, Work placement, Portfolio development etc.

Activities based on relevance are expected as a part of learning experience. Time required for these activities along with different newer Teaching learning methods supported by various Audio visual aids can be considered as **non-lecture hours**. These hours are indicated as per topic list in this column.

Table 3: Learning objectives (Theory) of Course AyUG-…..:

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/Category	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

Table 3 Learning objectives of course AyUG-…..: contents. This table contains ten columns. This comprehensive table explains Topic and subtopic wise points in the table. Matched lecture and no lecture hours explained as per D2 and E2 columns. It also explains learning Objective of the topic, Domain and subdomain as per Blooms Taxonomy, level, appropriate Teaching learning Method, assessment method, type of assessment and Integration for teaching.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

A3 indicates Course learning outcome (CO): - CO are explained in Column A1. Topic list is explained in column A2. This column A3 explains relation of Topic in list and course outcome denoted corresponding CO number. One topic and Objectives for topic may contribute in one or more than one CO s. They are also denoted in this column.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

B3 **Learning Objectives:** - Learning objectives are clearly written, specific statements of observable learner behavior or action that can be measured upon completion of an educational activity. It is a description of what the learner must be able to do upon completion of an educational activity. A well-written learning objective outlines the knowledge, skills and/or attitude the learners will gain from the educational activity. One Topic covers one or many learning objectives. They are noted in Column B3. Each objective start with a verb. Before that line in the first cell "At the end of the session, the student should be able to" is common to all the statement.

A3 Course outcome	B3 Learning Objective (At the end of the session, the student should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point > (Lecture:- <Number> hours, Non lecture <Number> hours)									

C3 indicates **Domain of learning.** Benjamin Bloom has identified three domains of educational activities. The three domains are Cognitive, psychomotor and affective. Cognitive is for mental skills (Knowledge), Psychomotor is for manual or physical skills (Skills) while Affective is for growth in feelings or emotional areas (Attitude), They are also indicated by KSA (Knowledge, Skills and Attitude). All activities related to teaching and learning are aligned to these domains of learning.

Cognitive domain involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. There are six major categories. They are in ascending order. Lowest level is Knowledge (Recall), followed by Comprehension, Application. Analysis, Synthesis and Evaluation in the pyramid. They starting from the simplest to the most complex.

Cognitive/Knowledge- This level involves the foundational understanding of facts, concepts, and information. It includes recalling specific details, definitions, and essential terms, showcasing the ability to remember and recognize information.

Cognitive/Comprehension -At this level, individuals grasp the meaning of information, rephrase it in their own words, and interpret it. They demonstrate understanding by explaining concepts, summarizing content, and translating complex ideas into simpler terms.

Cognitive/Application - This level focuses on using learned knowledge to solve practical problems or perform specific tasks. It involves applying principles, concepts, or methods in real-world scenarios, demonstrating the ability to transfer theoretical understanding into practical use.

Cognitive/Analysis - At the analysis level, individuals break down complex ideas into smaller parts, identifying patterns, relationships, and causes. They delve deeper into information, evaluating components and recognizing connections between various elements.

Cognitive/Synthesis - Synthesis involves combining separate elements or concepts to form a new, cohesive whole. Individuals at this level create original interpretations, develop new ideas, or generate solutions by integrating different pieces of information.

Cognitive/Evaluation-This level entails making judgments and assessments about the value, validity, or quality of information, theories, methods, or solutions. Individuals critically analyze and compare ideas, weigh evidence, and form reasoned conclusions based on established criteria.

These cognitive levels represent a progression from basic understanding to critical thinking and creative synthesis, showcasing the depth of intellectual engagement in the learning process.

Psychomotor domain includes physical movement, coordination, and use of the motor skill areas. Development of these skills requires practice and is measured in terms of speed, precision, procedures, or techniques in execution. The seven major categories listed in order are Perception, Set, Guided response, Mechanism, Complex Overt Response, Adaptation and Origination.

Perception - This category involves becoming aware of and recognizing stimuli. It's the foundational level where individuals start to notice and identify relevant cues.

Set - Set refers to mentally preparing oneself to execute a specific physical action. It includes getting ready and understanding what needs to be done.

Guided Response - At this level, individuals follow instructions and perform tasks under guidance or supervision. They demonstrate basic motor skills based on clear directions.

Mechanism - Mechanism is about performing tasks with improved coordination and efficiency. Individuals gain better control over their movements and actions.

Complex Overt Response - Complex overt response involves executing intricate and coordinated actions with smoothness and precision. It's a step beyond basic mechanics, indicating a higher level of proficiency.

Adaptation - Adaptation entails modifying movements and responses based on changing conditions or unexpected situations. Individuals display flexibility and the ability to adjust their actions.

Origination - Origination is the highest level, involving the ability to create new movements, techniques, or approaches. Individuals at this stage innovate, improvise, and develop novel solutions.

These categories represent a hierarchical progression in motor skill development, starting from basic awareness and progressing to the ability to innovate and create new movements.

Affective domain includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes. The five major categories listed in order are: Receiving, Responding, Valuing, Organization and Internalizing values (characterization).

Affective/Receiving - This level involves being open to and aware of certain stimuli or information. It signifies a willingness to pay attention and acknowledge ideas, opinions, or feelings from others.

Affective/Responding - At this level, individuals actively respond to the stimuli they've received. This might include expressing opinions, showing interest, or participating in discussions related to the received information.

ncism
॥ आयुष सर्वलोकानाम् ॥

Affective/Valuing - Valuing reflects the development of a personal connection and attachment to certain values, ideas, or feelings. Individuals at this level begin to attach significance and importance to what they've received and responded to.

Affective/Organization - Organization entails the organization of values and beliefs into a coherent and consistent framework. Individuals at this level structure their values, aligning them with each other and with their own personal identity.

Affective/Characterization - Characterization is the highest affective level, representing the internalization and embodiment of values. Individuals at this level consistently demonstrate their values through actions and behavior, making these values an integral part of their identity.

These affective levels illustrate a progression from simple awareness and acknowledgment to a deep integration of values into one's identity and actions.

These are denoted in column C3 e.g., Cognitive/Knowledge.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

D3 : Considering the Course outcome, Learning objective, level of learner(UG/ PG etc), topics are classified into Must to know, Desirable to know and Nice to know. This classification is essential to focus depth of the teaching, allotted time and efforts in teaching. It reflects in Teaching learning Methods and assessment. Must know should be covered in depth, Desirable to know as an introduction and Nice to know should be a sensitization.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to	E3 Level Does/ Shows how/	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration

	should be able to)		know	Knows how/ Know					
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

E3 Levels of competencies in Clinical practice. It is based on Millar's Pyramid. It is divided in four levels. Lower two levels are Know and Know how based on Cognitive. Top two Shows and does for behavior. Lower three levels are useful in UG. In any topic based on the Domain and importance, Level, Teaching and learning activities as well as Assessment methods are planned. These levels for each objective in topic are noted in Column E3.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

F3 T – L Methods: - Teaching learning methods. Teaching learning methods are planned based on Topic need, Domain, Importance, Level to be assessed. This column indicates traditional methods like lecture as well as interactive methods.

Lecture method is an educational presentation delivered by an instructor to a group of students with the help of instructional aids and training devices. In lecture method, the teacher orally presents the course material in an organized way to the students. Lectures may contain varying level of student participation, and the students take notes. Lecturing is one of the oldest methods of teaching used by the teachers of higher education. Lecture method gives more importance to content presentation, where the teacher is active and the students are passive, but the monotony of teaching will be overcome by various methods of Interactivity and Audio-visual aids. It is fastest and easiest way of large group teaching. Lecture method helps to motivate, clarify doubt, review the understanding by verbal and nonverbal responses.

- **Lecture with PowerPoint (PPT):** The instructor uses PPT slides to deliver structured content visually. These slides can include key points, diagrams, images, and concise explanations. PPT enhances understanding by presenting complex information in a digestible format. The visual appeal maintains student engagement and aids in retention. However, it's important to balance slides with verbal explanations to ensure active participation and prevent a passive learning environment.
- **Group Discussions:** After the lecture or specific segments, students engage in group discussions. This allows them to share their interpretations, ask questions, and explore the material collaboratively. Group discussions promote critical thinking, diverse perspectives, and the application of concepts to real-world scenarios. It's an opportunity for students to actively process information, voice opinions, and learn from their peers' insights.
- **Video Clips:** Integrating relevant video clips enhances learning by providing visual context and real-world examples. Videos can depict medical procedures, historical events, scientific experiments, or interviews with experts. Visual demonstrations offer an additional layer of understanding and cater to different learning styles. After watching a video, students can analyze, discuss, and relate the content back to the lecture material.
- **Interactivity and Engagement:** This combined approach fosters active participation. Students interact with the PPT slides, engage in meaningful discussions, and connect with video content. These interactive elements cater to various learning preferences and encourage students to take ownership of their learning journey.
- **Comprehensive Learning:** Each component of the approach contributes uniquely. Lectures with PPT provide a foundation of knowledge, group discussions encourage critical thinking, and video clips offer practical context. The synthesis of these methods enriches the overall learning experience.
- **Effective Time Management:** Group discussions and video clips can be strategically placed within the lecture to break the session into manageable segments. This prevents information overload and provides opportunities for reflection.
- **Technology Integration:** Leveraging technology such as video-sharing platforms and collaboration tools for group discussions enhances accessibility and participation, especially in hybrid or online learning environments.
- **Assessment and Evaluation:** The integrated approach allows instructors to assess students' understanding through their participation in discussions, responses to video-related questions, and their ability to connect concepts from the lecture and videos.

In lecture, various other methods can be included. A large classroom can be converted to small groups. Converting large classrooms into smaller ones. It's about making a comfortable space for discussions and learning. In smaller classrooms, students can talk more easily, ask questions, and work closely with others. It's a place where everyone's voice can be heard, and students can really get into the subjects they are studying. This

change makes learning more interactive and personal, helping students connect better with their peers and teachers. Turning big classrooms into smaller ones comes with several advantages for their learning experience:

Personal Connection -In a smaller space, students can interact more closely with their classmates and teachers. This creates a sense of community and makes it easier to ask questions and share their thoughts **Active Participation** -Smaller classrooms encourage everyone to get involved in discussions and activities. Student won't feel lost in a crowd, and their voice matters. **Deeper Understanding** With fewer people around, student can have more in-depth conversations about the subjects they are studying. Students will have the chance to explore ideas from different angles. **Focused Learning** - it's easier to stay focused on the lesson. Distractions are reduced, allowing students to engage more fully with the material. **Increased Collaboration** - Working closely with classmates in a smaller space promotes teamwork. students can share ideas, solve problems together, and learn from each other. **Better Feedback** - Teachers can pay more attention to individual students in a smaller classroom. This means student can get more personalized feedback on their progress. Inclusive Environment - Smaller settings often feel more inclusive and welcoming. Students' are more likely to feel like a valued part of the group. Active Learning:-Activities like group discussions, debates, and hands-on exercises are more effective in small classrooms. Students' are actively involved in their learning journey.

Discussions - Guiding discussions is a teaching method that offers both incredible rewards and some challenges. It's a way to encourage critical thinking in a dynamic manner. By using discussions as a central teaching technique, we can prompt active thought and engagement. Even large groups can be transformed into smaller ones, creating an opportunity for more interactive activities. While leading discussions can be demanding, it's also incredibly satisfying as it nurtures a deeper understanding of the subject and enhances collaborative learning.

Brainstorming - Imagine a storm of ideas where creativity flows freely! Brainstorming is an exciting teaching technique that encourages you to generate a bunch of fresh ideas in a short time. This happens in a group setting, where no idea is considered wrong. It's all about sparking innovative thinking and finding new solutions. By sharing their ideas and hearing others', you get to explore a wide range of perspectives. This method nurtures their creativity and helps you approach challenges with a creative and open mind. is used as one of the teaching methods. the students participate by responding or presenting views on the topic. This technique encourages new ideas among students.

Inquiry-Based Learning Inquiry-Based Learning begins with the art of questioning, as students either spontaneously generate queries or are guided to do so. These questions serve as the catalyst for exploration, leading students to seek answers through research, engaging activities, and

collaborative efforts. This approach fosters an environment where students actively shape their learning, nurturing curiosity, critical thinking, and teamwork as they navigate the journey of discovery.

Problem-based learning (PBL) is a student-cantered approach in which students learn about a subject by working in groups to solve an open-ended problem. This problem is what drives the motivation and the learning.

Case-Based Learning - Similar to the methods discussed earlier, Case-Based Learning also involves diving into real-life situations. Here, students engage with a case, often drawn from clinical practice or real-life scenarios, as a starting point for learning. These cases encourage students to apply their knowledge and think critically. They analyze the situation, consider different angles, and propose solutions. This approach transforms learning into a practical adventure where students put their knowledge to the test by solving genuine problems.

Project-Based Learning - Project-Based Learning takes students on a different kind of journey. Instead of just learning from books, they spend a longer time, like a week, working on a single project. This project is a chance for them to put their learning to use and show what they've learned. They set goals for what they want to achieve, work on the project, and then present their work to their classmates. It's like a hands-on experience where they learn by doing.

Team-Based Learning (TBL) - In Team-Based Learning, learning is a team effort. Students prepare for class on their own, then come together in small groups to apply what they've learned. It's like a structured group activity where everyone contributes. The cool part is that it encourages students to be ready before class and helps them use what they've learned in a practical way. It's all about teamwork and applying knowledge to solve problems.

Flipped Classroom - Imagine learning in reverse! Flipped classrooms do just that. Before class, students do their homework by watching videos or reading materials provided by the teacher. Then, when they come to class, instead of a regular lecture, they dive into discussions and ask questions. It's like the classroom is flipped – what used to happen in class now happens at home, and the classroom becomes a hub for interaction and deeper understanding.

Blended Learning - Blended learning mixes things up in a cool way. It's like a blend of the traditional classroom and technology. Some parts of the learning happen online, and some still take place in class. It's a bit like the flipped classroom, but with a twist. This approach uses the power of technology and mixes it with good old classroom interactions, making learning more flexible and exciting.

ncism
॥ आयुष्य सर्वलोकानाम् ॥

Edutainment - Learning becomes fun with edutainment! It's all about mixing education and entertainment. Teachers use cool methods like videos, slideshows, demos, and discussions to keep students engaged and excited. Learning feels less like a chore and more like an adventure. Edutainment makes sure that students not only learn but also have a blast doing it.

Early Clinical Exposure (ECE) is a method that introduces students to real-world medical contexts early in their education, aligning theoretical knowledge with practical application. By immersing students in clinical settings, ECE instills relevance and motivation in their foundational studies, offering a glimpse into the healthcare environment that drives their professional growth. Whether through firsthand patient interactions or recorded videos, ECE bridges the gap between theory and practice, preparing students for their medical journey with a deeper understanding and a tangible connection to their future profession.

Simulation-Based Learning offers a dynamic educational method where students can put their learned skills into action within lifelike scenarios. This approach transforms abstract concepts into tangible experiences through hands-on practice. Whether it's practicing with simulated patients or real ones in a controlled clinical setting, such as a clinical skills lab, students learn to make informed decisions as they navigate through various scenarios. This method not only enhances their technical skills but also cultivates critical thinking and decision-making abilities, preparing them for real-world challenges in the medical field.

Role plays form the foundation of dramatic engagement and offer a unique approach to learning. This technique involves assuming different roles and enacting scenarios or problems, providing a safe space to practice responses and actions. By stepping into these roles, students work through situations and refine their approaches in a risk-free environment. This approach is highly effective in nurturing cognitive, emotional, and communication skills. Through role plays, students not only grasp theoretical knowledge but also develop a practical understanding of how to apply it in real-life scenarios. This interactive method empowers them to enhance their problem-solving abilities, emotional intelligence, and effective communication techniques, preparing them for the complexities of the real world.

Self-directed learning Self-directed learning is a transformative process where individuals take charge of their own learning journey. This involves evaluating their learning needs, setting goals, actively engaging in the learning process, and evaluating their progress. In this method, students not only acquire crucial subject matter knowledge but also develop essential skills for lifelong learning. With the aid of numerous online tools, e-learning platforms, and Massive Open Online Courses (MOOCs) aligned with the syllabus, students have the opportunity to curate their

learning experience. By selecting topics of relevance and significance, they tailor their learning to their interests and needs. Self-directed learning not only cultivates subject expertise but also hones skills such as self-discipline, time management, critical thinking, and independent decision-making. Through this approach, students become architects of their education, gaining knowledge and skills that extend far beyond the classroom.

Problem solving method: - Human beings face multi-dimensional problems in their lives, and they try to solve these problems in a particular way in the light of their previously gained knowledge and experiences. In this regard, it is essential for the students to be prepared for future or near future challenges by facing real life, or real like, problems in their learning environment, and finding appropriate solution of these problems. Many similar methods like Critical thinking, creative thinking can be part of this activity.

Kinesthetic Learning students perform hands-on physical activities rather than listening to lectures or watching demonstrations. Kinesthetic learning, values movement and creativity, is most commonly used types of instruction. Students are expected to do, make or create something. Poster making, model making, Chart making, Video Clip making. Many such activities can be part of learning.

Workshops offer an interactive and concentrated approach to learning, where students delve into specific topics and emerge with refined skills. These sessions not only foster skill development but also cultivate effective communication and ethical values. Through hands-on activities and discussions, students gain practical insights that align with program outcomes, bridging theoretical learning with real-world application. Workshops empower students with the tools and values needed for success in their medical journey.

Game-Based Learning Game-Based Learning introduces a captivating dimension to education, where students embark on quests to achieve specific goals. This approach seamlessly merges learning objectives with the excitement of earning points or badges, akin to video games. By immersing themselves in interactive challenges, students become problem solvers, navigating through scenarios and deciphering complex concepts in pursuit of achievement. Incorporating elements of gamification, this method engages students in a dynamic learning experience. As they conquer challenges, they develop critical thinking skills, strategize solutions, and deepen their subject understanding. This interactive journey not only enhances their knowledge but also fosters a sense of accomplishment and enthusiasm, transforming learning into an exciting adventure.

Library sessions extend learning beyond the classroom, offering students access to a treasure trove of resources. In these sessions, students dive into books, journals, and digital databases, honing their research skills and discovering a world of information. Library sessions empower students to explore topics in depth, supporting their academic growth and critical thinking abilities.

Peer Learning /Collaborative learning - Peer learning, a collaborative teaching method, encourages students to learn from each other. By working together on projects, discussions, and problem-solving activities, students exchange ideas, clarify doubts, and enhance their understanding. This approach nurtures teamwork, communication, and diverse perspectives, transforming learning into a collective journey.

Real-Life Experience - Real-life experiences bring classroom learning to life. Students engage with the practical application of their studies, whether through internships, clinical rotations, or hands-on activities. These experiences bridge the gap between theory and practice, equipping students with the skills and insights necessary for their future professions.

Regenerate.

Symposium - A symposium is a dynamic forum where experts and students come together to discuss and share insights on a specific topic. Through presentations, discussions, and debates, symposiums provide a platform for diverse perspectives and in-depth exploration. This collaborative approach encourages critical thinking and a comprehensive understanding of the subject matter.

Tutorial - Tutorials offer a personalized learning experience, allowing students to work closely with educators in small groups. In these sessions, students can clarify doubts, delve deeper into topics, and receive individualized guidance. Tutorials foster a supportive environment for asking questions and seeking clarification, enhancing overall comprehension.

Presentations - Presentations empower students to convey their ideas effectively to an audience. Whether through visual aids or verbal delivery, students develop communication skills and the ability to synthesize complex information. Presentations not only showcase knowledge but also cultivate confidence and public speaking abilities.

Practicals/ Hands-On Engagement. Practical sessions transform theoretical knowledge into practical skills. Through hands-on activities, experiments, and simulations, students gain a tangible understanding of concepts. Practicals enhance critical thinking, problem-solving, and decision-making abilities, preparing students for real-world challenges.

ncism
॥ आयुष सर्वलोकानाम् ॥

X-ray identification is a skill that enables medical professionals to decipher diagnostic images and uncover vital information. Through practice and guidance, students learn to identify anatomical structures, anomalies, and potential medical conditions. This skill sharpens observation abilities and cultivates a deep understanding of medical imaging techniques.

Case diagnosis involves analyzing patient data, symptoms, and medical history to arrive at accurate diagnoses. Students engage in critical thinking and problem-solving as they piece together information to identify the underlying health issue. This method not only enhances medical knowledge but also sharpens analytical and decision-making skills.

Lab Report Interpretation - Interpreting lab reports is essential for medical professionals to understand patient health. Students learn to analyze data from various tests, translating numbers and values into actionable medical insights. This skill fosters proficiency in understanding medical reports and aids in making informed clinical decisions.

Drug analysis equips students with the ability to comprehend the effects of pharmaceutical substances on the human body. Through research and practical exploration, students gain insights into drug interactions, mechanisms, and potential side effects. This skill contributes to safe and effective patient care, highlighting the crucial intersection of pharmacology and patient well-being.

Demonstrations, often referred to as demos, are potent tools for interactive learning. They present practical examples, clarifying complex concepts by providing hands-on experiences. Models, whether physical or digital, are a common subject for demos, allowing students to engage directly with abstract ideas and gain a deeper understanding. Through model demonstrations, students can visualize relationships, simplify intricate theories, and foster active participation, making learning both engaging and effective. Demonstrations are powerful tools that bridge the gap between theoretical knowledge and practical application. They provide students with visual and hands-on experiences, enhancing their understanding of complex concepts. Whether conducted at the bedside, in a lab, or in a garden, demonstrations bring learning to life by allowing students to witness theories in action.

Bedside demonstrations take learning beyond the classroom and into the realm of patient care. By observing medical procedures, assessments, and interactions with patients at the bedside, students gain practical insights that textbooks alone cannot provide. This method enhances clinical understanding, communication skills, and empathy, fostering a holistic approach to healthcare.

Lab demonstrations provide a hands-on experience to explore scientific principles in action. Through experiments and simulations, students witness concepts coming to life, deepening their comprehension and analytical skills. Lab demonstrations bridge theory and application, fostering critical thinking and an intimate understanding of scientific processes.

Garden demonstrations connect students with the natural world, particularly in fields like botany and herbal medicine. By observing plant growth, species identification, and cultivation techniques, students gain practical knowledge about plants' medicinal properties. Garden demonstrations offer a sensory and interactive learning experience, enriching students' understanding of nature's role in healthcare.

Field visits offer students a firsthand experience of real-world contexts related to their studies. Whether exploring ecosystems, healthcare facilities, or historical sites, these excursions bring theoretical concepts to life. Field visits foster a deeper understanding by allowing students to observe and interact with their environment, gaining practical insights that textbooks cannot provide. This experiential approach enhances knowledge retention, critical thinking, and a well-rounded perspective on the subject matter.

Encouraging the combination of field visits across diverse subjects can elevate the learning experience for students. For instance, organizing a sequence of visits can be incredibly beneficial. Starting with a trip to a GMP-certified laboratory in Rasashastra, students can witness pharmaceutical practices and quality control in action. Followed by a visit to a forensic laboratory in Agadtantra, they can explore the merging of medicine and law. Next, a herbal garden in Dravyaguna can provide practical insights into medicinal plants used in herbal medicine studies. Lastly, a visit to a Yoga institute in Swasthavritta can offer an understanding of holistic health practices.

Orchestrating such integrated educational visits, teachers can effectively highlight the connections between different subjects. This approach not only enhances students' comprehension of various disciplines but also prepares them for the interdisciplinary nature of real-world scenarios. Through these combined experiences, students can gain a more comprehensive and practical understanding of their field of study.

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration

				Know					
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

G3 Assessments: This column indicates method of assessment for the given Topic. Various types of assessment methods are given as per domain. For assessment of cognitive domain MCQ, extended matching items, SAQ, LAQ, Essay writing, modified essay questions (MEQs), Constructed Response Questions (CRQs), case study, open book test etc. can be conducted.

Using different assessment methods in education is really important. Each method helps teachers understand how well students are learning. Some methods check basic knowledge, like multiple-choice questions, while others like essays show how well students can think and explain. When teachers use a mix of methods, they can see different skills that students have. This also helps students who learn in different ways. Plus, using different methods helps students learn new things and be ready for real-life situations. So, by using different ways to check what students know, teachers can see the whole picture of how well students are learning and growing.

1. Diverse assessment methods enhance evaluation fairness and effectiveness.
2. Methods target different learning aspects, from basic knowledge to critical thinking.
3. Various methods accommodate diverse student learning styles and strengths.
4. Different approaches foster a wide skill range, from problem-solving to collaboration.
5. Assessment methods reflecting real-world scenarios bridge theory and practice.
6. Varied methods minimize bias and offer accurate insight into students' abilities.
7. Methods like essay writing promote higher-order thinking and skills.
8. Mixing methods maintains student motivation and engagement.

Theory Extended Matching Item (EMI): Theory Extended Matching Items present students with scenarios or clinical cases along with a list of possible responses. Students are tasked with matching the most suitable response to each scenario, thereby demonstrating their comprehension of theoretical concepts in practical contexts. This assessment method not only evaluates students' ability to recall information but also tests their application of knowledge to real-world situations, encouraging critical thinking and decision-making skills.

Theory Essay Writing: Theory essay writing provides students with an opportunity to explore topics in-depth. By crafting well-structured essays, students not only showcase their theoretical understanding but also their ability to analyze, synthesize, and present coherent arguments. This method assesses not just knowledge retention but also the higher-order cognitive skills of analysis, evaluation, and effective communication.

Theory Modified Essay Questions (MEQs): Theory Modified Essay Questions challenge students to address complex scenarios that require the integration of theoretical concepts. By applying their theoretical knowledge to practical situations, students demonstrate their aptitude for critical thinking, problem-solving, and decision-making. This method goes beyond surface-level understanding, probing into students' ability to synthesize information and apply it effectively.

Theory Constructed Response Questions (CRQs): Theory Constructed Response Questions require students to provide detailed written responses to specific prompts. This method assesses not only students' comprehension of theoretical material but also their capability to apply that knowledge to real-world scenarios. CRQs demand thoughtful analysis and application of theories, providing insights into students' ability to translate theoretical concepts into practical solutions.

Practical Exam: Practical exams assess hands-on skills and application of theoretical knowledge in real-world settings. Students demonstrate their proficiency in performing tasks relevant to their field of study, showcasing their ability to apply concepts learned in practice.

Presentation: Presentations require students to communicate their understanding of a topic to an audience. This method enhances public speaking and communication skills, while also assessing the student's grasp of the subject matter and their ability to synthesize information effectively.

Practical Performance: Practical performance evaluations gauge students' competency in applying acquired skills. Whether in a laboratory, clinical setting, or workshop, students are observed as they execute tasks, demonstrating their proficiency and practical application of knowledge.

ncism
॥ आयुषे सर्वलोकानाम् ॥

Practical Survey: Practical surveys involve students collecting data from real-world scenarios. They learn how to design surveys, gather information, and analyze results. This method offers a hands-on experience in data collection and analysis, aligning theory with practical research skills.

Role Play: Role-playing scenarios assess students' ability to apply theoretical concepts to real-life situations. It tests their problem-solving, communication, and interpersonal skills by immersing them in simulated scenarios.

Model: Using models, students demonstrate their understanding of complex structures, systems, or processes. This hands-on approach assesses their ability to manipulate and interact with physical representations of theoretical concepts.

Poster: Poster presentations require students to visually present information, combining textual and visual elements. This method evaluates their capability to organize and convey complex concepts in a clear and concise manner.

Case Taking: Assessing students' interactions with simulated patients or cases evaluates their clinical and communication skills. It demonstrates their ability to gather information, diagnose, and recommend appropriate solutions.

Identification: Identification tasks assess students' knowledge of different elements, such as specimens, objects, or components relevant to their field. It evaluates their recognition and categorization skills.

Problem Solving: Practical problem-solving tasks replicate real-world challenges. Students apply their theoretical understanding to find solutions, showcasing their critical thinking and analytical skills.

Quiz: Quizzes serve as efficient assessments, evaluating students' grasp of core concepts and reinforcing theoretical fundamentals through repeated practice. They prompt ongoing review, aiding memory consolidation and providing immediate feedback on knowledge gaps.

Puzzles: Problem-solving puzzles push students to apply theoretical understanding in innovative ways. By challenging them to unravel intricate scenarios, these assessments nurture critical thinking, analytical skills, and adaptive reasoning.

Class Presentation: Presentations offer a multifaceted assessment platform. They not only gauge students' depth of subject knowledge but also hone their verbal communication, organization, and public speaking abilities, fostering well-rounded development.

Debate: Debates immerse students in dynamic discussions, honing research skills, critical analysis, and effective articulation of viewpoints. They encourage in-depth exploration of theoretical topics while evaluating persuasive capabilities.

Word Puzzle: Word puzzles inject an element of entertainment into vocabulary acquisition. Alongside assessing knowledge of essential terms, these puzzles stimulate cognitive connections, making learning engaging and memorable.

Online Quiz: Online quizzes blend technology with assessment, catering to tech-savvy learners. They provide immediate insights into students' understanding, making it a convenient tool for self-assessment and targeted improvement.

Online Game-Based Assessment: Game-based assessments leverage the allure of gaming to evaluate learning outcomes. By embedding educational objectives into interactive games, they enhance engagement while measuring knowledge application.

Making of Model: Crafting models bridges the gap between theory and practicality, evaluating students' ability to translate abstract concepts into tangible representations. This method fosters creativity, attention to detail, and spatial understanding.

Making of Charts: Designing charts showcases students' data interpretation and presentation skills. These assessments demand clarity in conveying complex information visually, assessing their ability to communicate effectively.

Making of Posters: Posters amalgamate creativity and communication skills. Crafting visually compelling representations of theoretical concepts evaluates students' visual design abilities and their capacity to synthesize and present information.

Interactions: Interactions foster dynamic engagement by assessing students' ability to communicate, collaborate, and respond effectively to diverse situations. These interactions can encompass discussions, debates, and role plays, evaluating their interpersonal and teamwork skills.

Critical Reading of Papers: Critical reading of papers hones students' analytical skills as they assess research articles. This method evaluates their capacity to extract meaningful insights, identify strengths and limitations, and engage with scholarly literature.

Creativity Writing: Creative writing assessments tap into students' imaginative prowess, challenging them to apply theoretical concepts in innovative ways. This approach fosters expression, original thinking, and the synthesis of diverse ideas.

Clinical Video Cases: Clinical video cases provide a virtual insight into real-world scenarios, testing students' diagnostic and decision-making skills. By evaluating their ability to analyze and respond to complex patient situations, this assessment mirrors clinical practice.

Simulated Patients: Simulated patients offer a controlled environment for students to interact with lifelike scenarios. This assessment method assesses clinical skills, communication, empathy, and the application of theoretical knowledge in a practical context.

Patient Management Problems: Patient management problems simulate real clinical challenges, evaluating students' ability to diagnose, treat, and manage patient conditions. This method assesses their clinical reasoning and application of theoretical concepts.

Checklist-Based Assessments: Checklist-based assessments provide structured evaluation criteria for various skills or tasks. They offer a systematic way to measure performance against predefined standards, ensuring comprehensive coverage of essential competencies.

OSCE (Objective Structured Clinical Examination): OSCE evaluates clinical skills through a series of stations, each focusing on specific tasks. This method rigorously assesses students' ability to perform practical procedures, communicate effectively, and demonstrate critical thinking under timed conditions.

OSPE (Objective Structured Practical Examination): OSPE evaluates practical skills in controlled settings. It involves multiple stations, each assessing specific skills or techniques, providing a well-rounded assessment of students' proficiency.

Mini-CEX (Mini Clinical Evaluation Exercise): Mini-CEX evaluates clinical skills through direct observation in real clinical settings. It provides immediate feedback on students' performance, assessing clinical decision-making, patient interaction, and problem-solving.

DOPS (Direct Observation of Procedural Skills): DOPS assesses procedural skills under supervision. Trained assessors directly observe and evaluate students' performance, ensuring competence in performing practical tasks and procedures.

CWS (Case-Writing Skills): CWS assesses students' ability to construct comprehensive clinical cases. It evaluates their understanding of clinical concepts, communication skills, and their capacity to present complex medical scenarios.

Rating Scales: Rating scales provide a structured approach to evaluating students' performance across predefined criteria. They offer a quantifiable assessment of skills, behaviors, or competencies, allowing for consistent and standardized evaluation.

Record Keeping: Record keeping assessments focus on accurate documentation of clinical encounters, procedures, and patient interactions. This method evaluates students' attention to detail, organization, and communication skills in maintaining comprehensive records.

Compilations: Compilations involve students gathering and presenting a collection of their work or accomplishments. This assessment method showcases their achievements, growth, and learning journey, offering a holistic view of their progress.

Portfolios: Portfolios are curated collections of students' work that showcase their achievements, reflections, and growth over time. This method encourages self-assessment, critical thinking, and the documentation of diverse learning experiences.

Log Book: Log books provide a chronological record of students' practical experiences, activities, and accomplishments. This assessment method offers insight into their hands-on training, clinical exposure, and the development of practical skills.

Trainers' Report: Trainers' reports offer valuable insights into students' performance from the perspective of educators or supervisors. These assessments provide an external perspective on students' progress, clinical skills, and overall competence.

Self-Assessment: Self-assessment encourages students to reflect on their own learning and performance. By evaluating their strengths, weaknesses, and areas for improvement, students take an active role in their educational journey.

Peer Assessment: Peer assessment involves students evaluating their peers' work, performance, or contributions. This method encourages collaboration, teamwork, and a deeper understanding of assessment criteria.

360-Degree Evaluation: 360-degree evaluation gathers feedback from multiple sources, including trainers, peers, and self-assessment. This comprehensive approach provides a well-rounded view of students' competencies, behaviors, and interactions.

Theory: Theory exams assess students' understanding of fundamental concepts and principles. They often require comprehensive written responses that showcase students' knowledge, critical thinking, and ability to communicate ideas clearly.

MCQ (Multiple Choice Questions): MCQs evaluate a wide range of content efficiently. They test students' recall, application, and analytical skills, offering a diverse assessment of their understanding.

SAQ (Short Answer Questions): SAQs require concise written responses to specific prompts. They assess students' ability to provide focused answers, showcasing their comprehension and application of key concepts.

LAQ (Long Answer Questions): LAQs assess in-depth understanding and critical analysis. Students are expected to provide detailed, structured responses that demonstrate their grasp of complex topics.

Practical Exams: Spotting, Identifications, Clinical Cases, Hands-On Skills

Spotting and Identifications: These assessments test students' ability to identify and label specific elements, such as anatomical structures or specimens. They focus on recognition and recall of visual information.

Clinical Cases: Clinical case exams present scenarios resembling real patient encounters. Students diagnose, analyze, and propose treatment plans based on the provided information, demonstrating clinical reasoning and decision-making skills.

Hands-On Skills: Practical assessments involve performing specific procedures or tasks. Students demonstrate psychomotor skills, accuracy, and attention to detail, showcasing their competence in applying theoretical knowledge in real-world settings.

Viva Exams: General and Structured

General Viva: General viva exams involve oral questioning on various subjects. Students must articulate their knowledge, reasoning, and problem-solving abilities in response to questions posed by examiners.

Structured Viva: Structured viva exams have predetermined questions and evaluation criteria. This focused approach ensures consistent assessment across students and covers specific learning objectives.

Incorporating these common examination methods ensures a comprehensive evaluation of students' theoretical knowledge, practical skills, clinical reasoning, and communication abilities. These diverse assessments promote a well-rounded understanding of students' capabil

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Te rm	J3 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

The H3 Formative and Summative Assessment Chart highlights the assessment methods specified in column G3 that are applicable for both formative and summative evaluation. While some topics are designated solely for formative assessment, a majority of the subjects are intended for both formative and summative evaluation. This dual approach ensures a comprehensive and ongoing assessment of students' progress and understanding across various topics. The integration of formative assessment aids in continuous improvement and learning enhancement, while summative assessment provides a final evaluation of students' knowledge and skills in those areas. This balanced combination contributes to a thorough assessment strategy that promotes effective learning outcomes and comprehensive evaluation of students' overall performance.

I3 Term wise distribution is again indicated in column.

The concept of Integration in J3 focuses on consolidating students' understanding of similar topics that span multiple courses or subjects. Through integration, the knowledge and aspects related to a particular theme or topic are harmonized to offer a comprehensive approach. This collaborative effort involves multiple departments collaborating to deliver a unified learning experience for shared topics. Opportunities for both horizontal (H) and vertical integration are identified in this column.

Horizontal Integration (H) pertains to courses within the same academic year. For instance, subjects such as Dravyaguna, Rasashastra, Agadtantra, Swasthavritta, Rognidan, and Samhita Adhyayan 2 can collaborate to provide a cohesive learning experience for students. By merging their expertise, these departments can offer a holistic understanding of shared topics, enriching students' comprehension and cross-disciplinary perspectives.

Vertical Integration (V) primarily encompasses subjects that span across various academic years, ranging from the initial to the final years of study. This method facilitates a gradual and coherent progression of knowledge and proficiencies, reinforcing fundamental principles as students advance through their educational trajectory. By vertically integrating subjects across different years, students are better prepared to grasp intricate concepts and apply their acquired knowledge throughout various stages of their learning journey. This comprehensive approach promotes a better understanding of the interrelatedness of subjects and cultivates a deeper appreciation of the curriculum

List of practical:-

List of Practicals

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**

S No of the practical. Name of the Topic, term and Hours.

Table 4: Learning objectives (Practical) of Course <course code>

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/ sub	D4 Must to know/ desirable to know/Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
Topic 1- <Topic point number> (Lecture:- <Number> hours, Non lecture <Number> hours)									

Similar to above table 3 for practical

- List of Practical is added to denote the practicals.

Table 5- Non-Lecture Activities Course AyUG….

Sr No	List non lecture Teaching-Learning methods	No of Activities

Table 5 summaries Non-Lecture Activities. These are indicative and as per the topic need, amongst the multiple methods denoted here and in the objectives table appropriate activities should be chosen.

Table 6: Assessment Summary: Assessment is subdivided in A to H points.

6 A-Number of Papers and Marks Distribution

Number of Papers and Marks Distribution for Second Professional BAMS Subjects

S. No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					
				Practical/ Clinical	Viva	Elective	IA	Sub Total	GRAND TOTAL
1.	AyUG-DG	**2**	**200**	**100**	**70**	**-**	**30**	**200**	**400**
2.	AyUG-RB	**2**	**200**	**100**	**70**	**-**	**30**	**200**	**400**
3.	AyUG-RN	**2**	**200**	**100**	**70**	**-**	**30**	**200**	**400**
4.	AyUG-AT	**1**	**100**	**100**	**60**	**10 (Set-SA)**	**30**	**200**	**300**
5.	AyUG-SA2	**1**	**100**	**-**	**75**	**10 (Set-SB)**	**15**	**100**	**200**
6.	AyUG-SW	**2**	**200**	**100**	**60**	**10 (Set-SC)**	**30**	**200**	**400**
							Grand Total		**2100**

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	II BAMS	3 PA & First TT	3 PA & Second TT	3 PA & UE*

PA: Periodical Assessment; TT: Term Test; UE: University Examinations.

***University Examination Shall be on entire syllabus.**

Theory i.e. Written by the MCQ, SAQ, LAQ as per MSE and Practical Examination by Practical / Clinical/ Viva.

Formative assessment as, it is assessment for learning, various other methods can be used. Considering cognitive, psychomotor and affective domain appropriate method as per column G3, appropriate method should be adopted.

(Refer above explanation of Formative assessment in G3 column)

Formative assessment should be frequent activity after teaching.

Records should be kept and cumulative marks should be forwarded to university as per table

Formative assessment is defined by two terms, Periodic Assessment and term test.

Periodic Assessment and Term Test - In table 6 C method for calculation of internal assessment marks is explained. Various periodic assessment methods are explained in the table 6 D.

6 C - Calculation Method for Internal assessment Marks (15 Marks)

For Samhita Adhyayan 2

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C.							

	** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.

OR

6 C - Calculation Method for Internal assessment Marks (30 Marks)

For AyUG-DG, AyUG-RB, AyUG-RN, AyUG-AT, AyUG-SW

TERM	PERIODICAL ASSESSMENT*					TERM TEST **	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

A detailed list of periodic assessment is given in this table. Chose one activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3 or any other as per objectives from this table.
Conduct periodic test for 15 marks.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyuUG - ……
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II (If applicable).

6 F Distribution of theory examination

				D **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**

Question paper Blue print is indicated as per Term, maximum marks allotted to topic and type of Questions.

A indicate List and name of topic and subtopic

B indicate Term

C indicate maximum marks allotted for topic or group of Topics.

D Distribution of type of question MCQ, SAQ, LAQ to be asked. "Yes" indicate can be asked. "No" indicate should not be asked.

6 G Blue print of paper I & II

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	Multiple choice Questions (MCQ)	1. Topic number 2. Topic number

	20 Questions 1 mark each All compulsory	3. Topic number 4. Topic number 5. Topic number 6. Topic number 7. Topic number 8. Topic number 9. Topic number 10. Topic number 11. Topic number 12. Topic number 13. Topic number 14. Topic number 15. Topic number 16. Topic number 17. Topic number 18. Topic number 19. Topic number 20. Topic number
Q2	Short answer Questions (SAQ) Eight Questions 5 Marks Each All compulsory	1. Topic number / Topic number 2. Topic number / Topic number 3. Topic number / Topic number 4. Topic number / Topic number 5. Topic number / Topic number 6. Topic number / Topic number 7. Topic number / Topic number
Q3	Long answer Questions (LAQ) Four Questions 10 marks each All compulsory	1. Topic number / Topic number 2. Topic number / Topic number 3. Topic number / Topic number 4. Topic number / Topic number

6 G - Blue printing of paper: - Based on 6 F should be used for framing question paper.

A indicates Sr No question

B indicates Type of Questions.

C indicates Topic number from which question is to be framed.

All questions should be compulsory.

For Q 1 MCQ 20 questions to be framed based on the topics indicated in column C. Must to know part 15 MCQ, Desirable to know 3 MCQ, Nice to know 2 MCQs.

For Q 2 SAQ 8 questions to be framed based on the topics indicated in column C. 7 Questions from Must to know 1 Question on Desirable to know and no Questions on Nice to know

For LAQ 4 questions to be framed based on the topics indicated in column C All questions on must know. No Questions on Nice to know and Desirable to know.

Structured Questions should be asked for LAQ. A clear demarcation of the should be given.

A balance of question assessing Knowledge, Comprehension, Application and Analysis should be maintained.

6 H Distribution of Practical Exam

SN	Heads	Marks
1	Practical (Total Marks 100)	
	Heading 1	
	Heading 2	
	Heading 3	
	Heading 4	
2	Viva Voce	
3	Internal	
4	Electives (if applicable))	
	Total Marks	

6 H indicates Marks Distribution as per various heads. Practical, Viva. Internal assessment marks(IA) and Electives (If Applicable).

7. References books/ Resources

Book and Resources are given.

Implementation

- Select a topic as per term
- Read the objectives
- Think of Domain
- Decide lecture plan and prepare material A/V aids(PPT, Charts etc)
- Decide non lecture activities to be conducted. Prepare resources (Case, problem etc)
- Decide assessment method (formative) and prepare material if required (e.g. Quiz, puzzle, etc)
- Make lesson plan. (Template next page)
- Conduct session/practical

LESSON PLAN TEMPLATE

List of Learning Resources : (Textbook, e – resources, other)
Referenced according to Vancouver style

Name of College:			
Name of Department (s)			
Name of Course Academic Year Batch –			
Learning Objectives:			
Instructional Method (Circle as appropriate) - Lecture /Seminar /Tutorial / Bedside Clinic / OPD Session / Community Visit / Hospital visit, any other			
Duration - LH- NLH			
Time	Activity Description	Resources/ A-V Aids	Assessment Method / s

ncism
॥ अयुषे सर्वलोकानाम् ॥

Contributions:



Curriculum Committee

COMMITTEES FOR DEVELOPMENT OF SYLLABUS FOR SECOND PROFESSIONAL BAMS SUBJECTS

ADVISORY COMMITTEE:

Sr.No	Name & Designation
1	Vaidya Jayant Deopujari, Chairman, NCISM
2	Dr. B.S. Prasad, President, Board of Ayurveda, NCISM
3	Dr. Raghuram Bhatta U. President, Medical Assessment and Rating Board for Indian System of Medicine (MARBISM), NCISM
4	Prof (Vaidya) Rakesh Sharma. President ,Board of Ethics and Registration for Indian System of Medicine, NCISM
5	Dr. Tanuja Nesari, Director, All India Institute of Ayurveda.
6	Dr Ravinarayan Acharya, Director General, Central Council of Research in Ayurvedic Sciences, CCRAS
7	Dr Pradeep Kumar Prajapati, Vice Chancellor, Dr Sarvepalli Radhakrishnan Rajasthan Ayurved University, Jodhpur
8	Professor(Dr.) Baldev Kumar, Vice Chancellor, Sri Krishna AYUSH University, Kurukshetra
9	Prof. Mita Kotecha, Pro Vice Chancellor, National Institute of Ayurveda Deemed to be University, Jaipur
10	Dr Pawan Kumar, Senior Technical Officer, World Health Organization (WHO)
11	Dr. Mitali Mukerji, Professor and Head of the Department of Bioscience and Bioengineering, Indian Institute of Technology Jodhpur, IIT Jodhpur
12	Dr. Viswajanani Sattigeri, Head CSIR-Traditional Knowledge Digital Library Unit, Delhi

Core Committee:

Sr.No.	Name	Designation	Organization
1.	Vaidya Jayant Deopujari	Chairman	National Commission for Indian System of Medicine, New Delhi
2.	Dr. B.S. Prasad	President	Board of Ayurveda, National Commission for Indian System of Medicine, New Delhi
3.	Dr. Atul Babu Varshney	Member	Board of Ayurveda, National Commission for Indian System of Medicine, New Delhi
4.	Dr Mohan R. Joshi,	Chief Coordinator	Professor and HOD, Samhita Siddhant & Sanskrit Department, Tilak Ayurved Mahavidyalaya, Pune, Maharashtra
5.	Dr Shweta Telang-Chaudhari	Co-coordinator (Second Professional Subjects)	Associate Professor Maharashtra University of Health Sciences, Nashik

EXPERT COMMITTEES (Subject - wise):

Dravyaguna (AyUG-DG)

S N		Name	Designation	Organization
1.	Chairman	Dr. Yogini Kulkarni	Professor	Pune District Education Associations, College of Ayurveda & Research Centre, Nigdi, Pune-411 044.
2.	Course Coordinator	Dr. Manjunath Ajanal	Professor	Rajiv Gandhi Education Society Ayurvedic college, Karnataka
3.	Facilitator: (HSET Expert)	Dr. Pramod Khobragade	Professor	Datta Meghe Ayurvedic Medical College, Hospital & Research Center, Maharashtra, Nagpur
4.	Member	Dr. TG Vinod Kumar	Sr. Scientist	Jawaharlal Nehru Tropical Botanic Garden & Research Institute Palode, Thiruvananthapuram, Kerala, India (JNTBJRI)
5.	Member	Dr. Prasanna Savanur	Professor	Faculty of Indian Medical System, SGT University, Haryana, GuruGram
6.	Member	Dr. Prakash Hegde	Professor	Sri Dharmathala Manjunatheshwara College of Ayurveda & Hospital, Karnataka, Hassan
7.	Member	Dr. Rajesh Sharma	Associate Professor	Government Ayurvedic Medical College, Akhnoor , Jammu and Kashmir
8.	Member	Dr. OM Prakash Rout	Associate Professor	Shri Narayan Prasad Awasthi Government Ayurved College, Chhattisgarh, Raipur

Rasashastra & Bhaishajya Kalpana (AyUG-RB)

S N		Name	Designation	Organization
1.	Chairman	Dr Rajeshwari V. Kamat	Professor	Dept of Rasashastra & Bhaishajya Kalpana KLE Shri B M Kankanawadi Ayurved Mahavidyalaya Post Graduate Studies & Research Centre, Shahapur, Belagavi, Karnataka
2.	Course Coordinator	Dr. Vinamra Sharma	Associate Professor	Dept of Rasashastra & Bhaishajya Kalpana Guru Gorakhnath Institute of Medical Sciences, Gorakpur, Uttar Pradesh
3.	Facilitator: (HSET Expert)	Vaidya Yoginee Patil	Associate Professor	Dept of Rasashastra & Bhaishajya Kalpana Tilak Ayurved Mahavidyalaya, Pune, , Maharashtra
4.	Member	Dr Raman Belge	Professor	Dept of Rasashastra & Bhaishajya Kalpana Shri Ayurved Mahavidyalaya, Nagpur Maharashtra
5.	Member	Dr. Raghuveer	Professor & HoD	Dept of Rasashastra & Bhaishajya Kalpana Ashwini Ayurvedic Medical College & PG Centre, Davangere, Karnataka
6.	Member	Dr Rajesh G. Baravaliya	Professor	Dept of Rasashastra & Bhaishajya Kalpana Govt. Akhandanand Ayurved College & Hospital, Ahmedabad,Gujarat
7.	Member	Dr Govindsahay Shukla	Professor	Dept of Rasashastra & Bhaishajya Kalpana University College of Ayurved, DSRR Ayurveda University, Jodhpur, Rajasthan
8.	Member	Dr. Himangshu Baruah	Assistant Professor	Dept of Rasashastra & Bhaishajya Kalpana sNorth Eastern Institute of Ayurveda & Homoeopathy (NEIAH), Shillong, Meghalaya

Roganidana and Vikriti Vigyan (AyUG-RN)

1.		Name	Designation	Organization
2.	Chairman	Dr. Anand More	Professor	All India Institute of Ayurveda, New Delhi
3.	Course Coordinator	Dr. Jai Kini	Professor	Y.M.T. Ayurvedic Medical College And Hospital, Navi Mumbai Maharashtra.
4.	Facilitator: (HSET Expert)	Dr.Manjiri Deshpande	Associate Professor	Tilak Ayurved Mahavidyalaya, Pune, Maharashtra
5.	Member	Dr. Deepti Parashar Mehta	Professor	Shri Krishna Govt. Ayurvedic College & Hospital, Kurukshetra, Harayana.
6.	Member	Dr. Ch. Srikrishna	Associate Professor	Dr. BRKR Govt. Ayurveda College, Hyderabad, Telangana
7.	Member	Dr. Prasanna Mogasale	Associate Professor	Sri Dharmasthala Manjunatheshwara College of Ayurveda, , Udupi, Karnataka
8.	Member	Dr.Nithin krishnan R.	Associate Professor	Faculty of Indian Medical System, SGT University, Gurugram, Haryana
9.	Member	Dr. Umesh Kumar Sapra	Assistant Professor	Chaudhary Brahm Prakash Ayurved Sansthan,Khera Dabar, New Delhi

Agada Tantra (AyUG-AT)

1.		**Name**	**Designation**	**Organization**
2.	Chairman	Dr Benil P B	Professor	Vaidyaratnam P.S. Varier Ayurveda College, Kottakkal, Kerala
3.	Course Coordinator	Dr Shivanand Patil	Assistant Professor	All India Institute of Ayurveda, Goa
4.	Facilitator: (HSET Expert)	Dr. Sonali Chalakh	Professor	Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod, Wardha
5.	Member	Dr Shobha Bhat	Professor	Faculty of Ayurveda, IMS, BHU, Varanasi,Uttar Pradesh
6.	Member	Dr Mahesh P Savalgimath	Professor	KLEU Shri.BMK Ayurveda Mahavidyalaya, Belgaum
7.	Member	Dr Kiran Nimbalkar R	Associate Professor	Ayurved & Unani Tibbia College and Hospital, Delhi
8.	Member	Dr. Sharad Porte	Associate Professor	National Institute of Ayurved, Rajasthan, Jaipur
9.	Member	Dr. Ankur Mishra	Assistant Professor	Mai Bhago Ayurvedic Medical College for Women, Punjab

Samhita Adhyayana-2 (AyUG-SA2)

		Name	**Designation**	**Organization**
1	Chairman	Dr Vinodkumar M V	Professor	Vaidyaratnam P.S. Varier Ayurveda College, Kottakkal, Kerala
2	Course Coordinator	Dr. Sharad kumar M	Assistant Professor	Sindagi Shanthaveereshwar Ayurvedic Medical college and Hospital, Haveri, Karnataka
3	Facilitator (HSET Expert)	Dr. Sumith Kumar M	Associate Professor	Guru Gorakshnath Institute of Medical Sciences (Ayurveda College), Gorakhpur, UP
4	Member	Dr. Babasaheb Patil	Professor	RJVS Bhaisaheb Sawant Ayurved Mahavidyalaya, Sawantwadi, Maharashtra
5	Member	Dr Santosh SR Nair	Associate Professor	Chaudhary Brahm Prakash Ayurved Charak Sansthan, New Delhi
6	Member	Dr. Venkat Sivudu Kurma	Associate Professor	Sri Venkateshwara Ayurvedic College, Tirupati, A. P.
7	Member	Dr. Savita Sajjan	Professor	Ayurved Mahavidyalaya & Hospital, Hubballi, Karnataka
8	Member	Dr.Shashirekha. H.K	Associate Professor	Faculty of Ayurveda, IMS, Banaras Hindu University, Varanasi, U.P

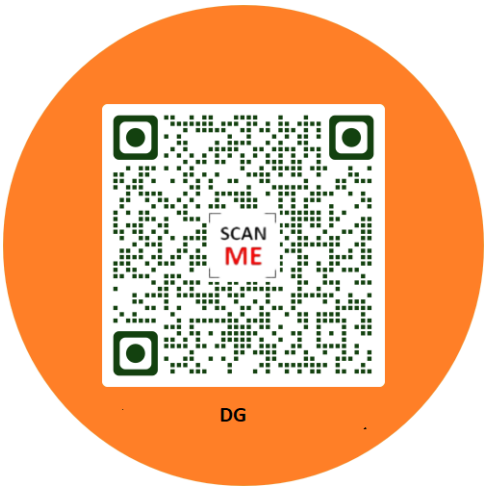
Swasthavritta (AyUG-SW)

1.		**Name**	**Designation**	**Organization**
2.	Chairman	Dr. P Sudhakar Reddy	Professor	JSS Ayurveda Medical College, Mysuru, Karnataka
3.	Facilitator: (HSET Expert)	Dr. Prasad Deshpande	Associate Professor	Government Ayurved College, Vazirabad, Nanded, Maharashtra
4.	Member	Dr. Jayan D	Professor	Govt. Ayurveda College Tripunithura, Kochi, Kerala
5.	Member	Dr. Ashok Patil	Professor	KLEU Shri.BMK Ayurveda Mahavidyalaya Belgaum, Karnataka
6.	Member	Dr. Mihir Hajarnavis	Professor	Tilak Ayurved Mahavidyalaya, Pune, Maharashtra
7.	Member	Dr. Unnikrishnan. S	Professor	Chaudhary Brahm Prakash Ayurved Charak Sansthan, New Delhi
8.	Member	Dr. Shivakumar Harti	Associate Professor	All India Institute of Ayurveda, New Delhi

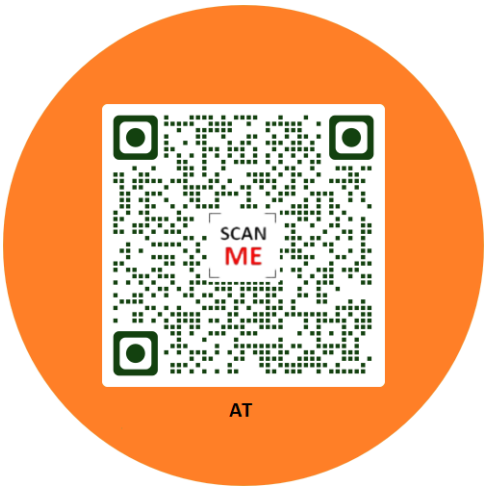
ncism
॥ आयुषे सर्वलोकानाम् ॥

QR Codes for Curriculum Files: -

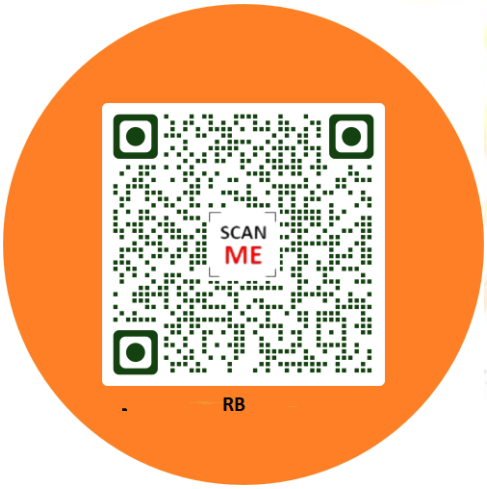
AyUG-DG



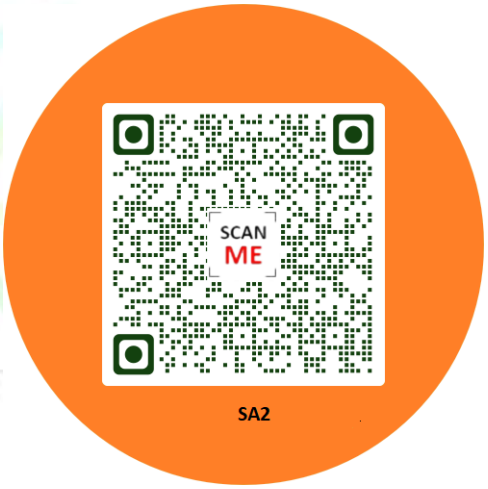
AyUG-AT



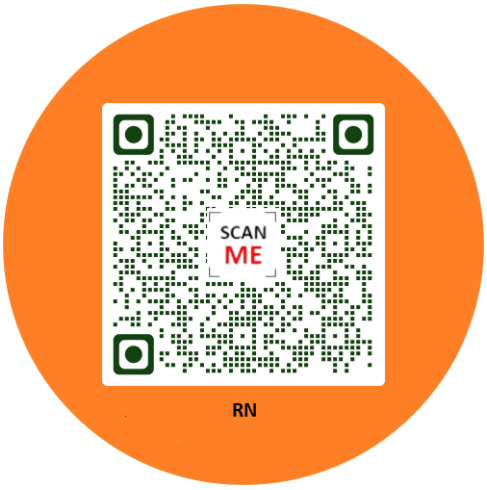
AyUG-RB



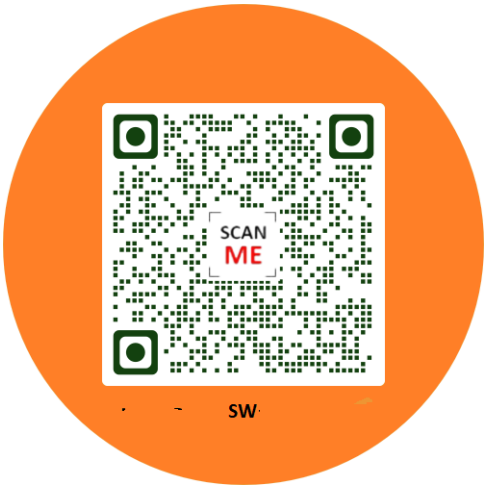
AyUG-SA2



AyUG-RN



AyUG-SW



ncism
युपे सर्वलोकान

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Swasthavritta evam Yoga

(SUBJECT CODE : AyUG-SW)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

SW

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SW

Summary

Total number of Teaching hours: 400			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(NLH)-Theory		250	250(NLH)
Paper I & II	75		
Non Lecture hours(NLH)-Practical			
Paper I & II	175		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	(Set SC) 10	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Health care, especially the preventive health care is coming to a fore front, most so during recent years due to pandemic situation. In fact, the preventive health care is indeed the strength of Ayurveda as its primary motto itself is 'Swasthasya swasthya rakshanam', Keep sustaining health of a healthy and nourishes it. The students of Ayurveda need to understand it better, who can carry this message and contribute for building a healthy India, may the entire world. Keeping this in mind any effort to sensitize the student community to understand the basics of Swasthavritta, the preventive health care of Ayurveda is laudable. Swasthavritta is an important subject of the BAMS program for the undergraduate students of Ayurveda.The term Swastha means healthy individual and Vritta means actions or regimen thus Swasthavritta denotes the actions or regimen which can be observed to maintain the health of a healthy individual and to prevent the diseases.This subject refers to the Preventive medicine and social medicine/ Community medicine of contemporary medical science.

Swasthavritta deals with the Vaiyaktika swasthavritta (Individualized lifestyle including in terms of prevention, promotion & maintainance of health) incudes Dinacharya, Ritucharya, Sadvritta, Rasayana , Pathya-Apathya for both Swastha as well as disease condition. Samajika swasthavritta- Community health deals with Janapadodhwamsa, Environmental health, Occupational health, School health and National health programs etc, along with these topics Swasthavritta also deals Yoga and Naturopathy. Thus, Swasthavritta provides holistic health care to community.

New curriculum of Swasthavritta is designed considering cognitive, affective, and psychomotor domains. There are group discussions, workshops, field visits, health institutional visits, factory visits health surveys and activities beyond the textbook during the practical hours like preparation of charts, models, seminar presentations by students. Swasthavritta subject also deals with teaching learning methods like role play, flipped the classroom, etc. Some assessment methods like OSPE, PBL, DOPS, CBD, skill assessment, etc are incorporated.

This curriculum serves as a valuable resource for both educators and students, guiding them through the fascinating realm of swasthavritta. May the knwoledge gained from this curriculum empower students to make a positive impact in promoting health, preventing diseases and creating a healthier society. This curriculum epmowers the Ayrervedic graduates who capable of designing customized individualized lifestyle as well as community health measures as per Ayurvedic principles. This also makes graduates to become health educators, who will take part in national health programs, who can assess community needs and develop measures to counteract the health problems and make them to prepare competent community physicians.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 10
Table 3: Learning objectives (Theory) of Course 14
Paper 1 14
Paper 2 27
List of Practicals 37
Table 4: Learning objectives (Practical) 38
Practical 1 38
Table 4a: List of Practical 45
Activity 48
Table 5- Teaching learning method 50
Table 6: Assessment Summary: Assessment is subdivided in A to H points 51
6 A-Number of Papers and Marks Distribution 51
6 B - Scheme of Assessment (formative and Summative) 51
6 C - Calculation Method for Internal assessment Marks 52
6 D - Evaluation Methods for Periodical Assessment 52
6 E Question Paper Pattern 53
6 F Distribution of theory examination 54
Paper 1 54
Paper 2 54
6 G Blue print of paper I & II 56
6 H Distribution of Practical Exam 59
References Books/ Resources 62
Abbreviations 65

Course Code and Name of Course

Course code	Name of Course
AyUG-SW	Swasthavritta evam Yoga

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SW At the end of the course AyUG-SW, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of principles of Swasthavritta in lifestyle modifications.	PO1,PO2,PO4,PO6
CO2	Assess the health status and advise preventive & promotive measures according to Ayurveda principles	PO3
CO3	Demonstrate and advise Yoga and Naturopathy as health promotive and disease preventive regimen	PO1,PO4
CO4	Understand and apply the principles and components of primary health care and health policies to achieve the goal of health for all	PO2,PO5
CO5	Advocate and propagate preventive principles of Ayurveda and contemporary sciences through Information, Education and Communication(IEC)	PO8
CO6	Conduct community surveys and apply epidemiological principles for the assessment of health & morbidity as a community physician	PO2,PO5
CO7	Understand and apply the principles of environmental health and its effects on public health with control measures	PO3,PO4
CO8	Demonstrate skills and research aptitude for the promotion of health and prevention of diseases	PO9

Table 2 : Contents of Course

Paper 1 Principles of Swasthavritta, Yoga and Naturopathy					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**Swastha and Swasthya** Definition of Swasthavritta and its objective. Swasthalakshanas, Arogyalakshanas, Dhatusamyalakshanas. Concept of Health & Operational definition of health. Importance of Shodhana in Swastha in relation to Sanchita & Asanchitha Dosha & Classification of Swastha purusha as Sanchita dosha and Asanchita Dosha.Dimensions of health -Physical, Mental and Social. Concept of well-being : objective component of well-being - standard of living and level of living and subjective component of well-being - Quality of Life**.** One health concept / Vasudhaiva Kutumbakam" or "One Earth · One Family- One Future".	1	6	3	0
2	**Healthy Life style -Dinacharya (Daily regimen)** Concept of Primordial, Primary, Secondary and Tertiary Prevention along with examples in Ayurveda. Importance of Ahara and Vihara as the health promotive and disease preventive measures. Importance of **Niyata kala vihara (**Dinacharya, Ritucharya) and **Aniyata kalaVihara**(Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadi asparshana) for health promotion and disease prevention. Concept of waking up at 'Brahme muhurta'in the present scenario and the effect of early rise on health, sleep, alertness and memory. UshaJalapana' (Drinking water in early morning). Importance of Malatyaga in vata kaala - early morning (Good Bowel Habits.). Mukhaprakshalana and face washes used currently. Concept of Dantadhavana and modern-day brushing techniques and dentifrices. Concept of Jihwanirlekhana and the tools used in today's era and their benefits. Concept of Anjana as a health promotive measure. Kavala and gandusha for oral hygiene including mouthwashes available in the market. Abhyanga as as health promotive measure. Importance of the Tambula. Prayogika Dhoomapana (Practicable & non-practicable Dhoomapana- inhalation of herbal fumes/ herbal inhalers with their benefits and contraindications. Ill effects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health. Applied aspects of Sarvanga Abhyanga, Padabhyanga, Shiroabhyanga and their possible physiological effects. Application of Abhyanga according to different age groups and occupation/activity. Different snehas/oils to be used for daily abhyanga as per seasons and geographical variations. Concept of Vyayama and present-	1	38	8	5

	day practices such as aerobic exercises, muscle strengthening exercises etc.to be practiced as per prakriti, age and occupation. Ardhashakti lakshanas of vyayama and the consequences of ati vyayama. Udwartana, Utsadana Udgharshana . Snana- Types of different types of bath and Physiological effects of snana on body and mind. Importance and benefits of Anulepana. Merits and demerits of present-day applications like face powder, face pack, balm, lotions, lipsticks, deodorants and perfumes etc. Importance of proper clothing (Vastradharana) in social life.				
3	**Ratricharya** Ratri bhojanvidhi and its relation to health. Ratri shayana vidhi in relation to the proper time of sleep. Relation between Nidra and health. Effects of Yukta & Ayukta nidra. Effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra and Akala Nidra. Ahara and Vihara Causing sound sleep as well as disturbed sleep. Formulation of the duration of sleep according to age and Sleep in healthy and ailing persons.Various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defense d. Master Circadian Clock and Master Circadian Rhythm e. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle. Sleep apnea , insomnia, narcolepsy and restless leg syndrome. Solutions to Asatmya jagarana (sleep disorders). Importance of observing brahmacharya and abrahmacharya in ratricharya in relation to health. Brahmacharya with special reference to lifestyle guidelines. Reproductive and sexual health according Ayurveda.	1		6	1
4	**Ritucharya** Classification of kaala , Adana kala and visarga kala , identification of seasons based on the ritu lakshanas in different geographical areas. Sanchaya- Prakopa-Prashamana of Dosha with their gunas in each ritu. Relation of Agni , Bala and Ritu with its application. Ritu shodhana for the prevention of diseases. Pathya - Apathya in regards to Ahara -Vihara in all six ritus in present scenario. Importance of ahara and vihara in ritu sandhi and Yamadanshtra kala. Rituharitaki as a rasayana with research updates. Effects of Rituviparyaya on health and its relation to janapadaudhwamsa/maraka vyadhis with present day examples.	1		5	2
5	**Roganutpadaniya** Concept of vegadharana and vega-udirana in relation to health and morbidity.Symptoms and management principles of adharaniya vega janya vyadhis from	1	13	2	1

	bruhattrayee.Concept of vegaudirana (viz. Use of snuffing powder, forcible evacuation of bowels & bladder etc.). Importance of dharaniya vegas in promotion of mental health.				
6	**Sadvritta** Sadavritta measures for the maintenance of personal ,social and spiritual health. Observance of Sadvritta for the prevention of Adharma. Achara Rasayana" and its role in the prevention and control of diseases.Characteristics of a mentally healthy person, warning signals of poor mental health, types of mental illness and causes of mental ill-health. Mental health services and comprehensive mental health programme. Role of trigunas and satvavajaya in mental health promotion in present era. Digital health promotion	1		2	1
7	**Ahara** Significance of Ahara for health and well-being according to Ayurveda & Contemporary science. Classification of aharadravyas as per Ayurveda & Contemporary science. Ahara vidhividhana, Ahara sevanakala & Dwadasha ashanapravicharana . Applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Ahara &vihara leading to Santarpanajanya evam Apatarpanajanyavyadhi and importance of upavasa and concept of intermittent fasting. Benefits of Shadrasabhojana. Importance of Ashta aharavidhivisesha ayatanani in present era. Importance of Nityasevaniyadravyas in the maintenance of health. Properties (Guna& karmas) of Ahara dravyas in the following vargas with their nutritive value: Dhanyavarga – Shuka Dhanya (Cereals and Millets), Shami Dhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegatables), Kanda varga (roots and tubers), Phalavarga (Fruits), Taila varga (Fats and Oils), Ikshuvarga (Sugarcane Products) &Madyavarga(Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara UpayogiVarga (Spices & Condiments), Kritannavarga(Prepared Food), Mamsavarga (Meat types) and JalaVarga.Definition of Pro-biotics and Pre-biotics and their utility. Proximate principles of Food - Recommended Daily Allowance according to various conditions, Sources and deficiency diseases of Protein, Carbohydrate, Fats, Vitamins, and Minerals. Definition of Balanced diet and diet for an individual depending on age, body weight and physiological status and Social Aspects of Nutrition.Food hygiene, Sanitation of eating places, Preservation of food, Food handlers, Foodborne diseases, Food fortification, Food adulteration and Food toxicants. Milk Hygiene, Milk composition, Source of infection for Milk, Milk borne	1	20	20	15

	diseases, Clean and Safe milk and Pasteurization of milk Meat Hygiene, Meat inspection, Slaughterhouse and Freshness of fish and egg. Safety and hygiene measures for Fruits and Vegetables.Formulation of Pathya-Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus,Cardiovascular diseases and Acid peptic diseases.Description of Food safety and standards regulation(Ayurveda Ahara Regulations), 2022 and Food safety and standards Act, 2006. Different Dietary Supplements and Ergogenic Aids.Impact of different dietary patterns: Mediterranean diet, Keto Diet, DASH diet, the MIND diet, Vegan diet, Ovo-lacto-vegetarian, Pesco-vegetarian, Plant-based diet, Intermittent diet, the Nordic diet, importance of organic foods, merits and demerits of genetically modified foods and inflammatory foods such as fried foods, cookies, hot dogs, red meat, refined grains, pizza, burger etc,. and instant foods like Maggi etc,. Concept of slow and fast foods and impact of cooking processes like boiling, steaming, sautéing, fermenting etc. (samskara) on health. Definition of Nutraceuticals, Nutrigenomics, Nutrigenetics. Concept of Viruddhaahara with classical and modern-day examples and the application of this in the prevention of diseases				
8	**Rasayana for Swastha** Definition of Rasayana and benefits of Rasayana. Classification and types of Rasayana with examples. Urjaskara Rasayanas as per age and occupations /Activities .Antioxidant & immunomodulatory effects of Rasayana with reference to research articles. Importance of lifestyle counselling with its methods.	1	5	2	2
9	**Yoga** Etymology/derivation of the word 'Yoga'. Definitions of Yoga according to PatanjaliYogasutras, Bhagavad Gita and Charaka Samhita. Difference between Rajayoga, Hathayoga and Karmayoga.Yogabhyasa Pratibhandhakas and Yoga Siddhikarabhavas. Mitahara and Pathya-apathyas during Yogabhyasa . Concept of Panchakosha theory. Description of Ashtangas of Yoga - Yama , Niyama , Asana .Pranayama , Pratyahara, Dharana, Dhyana and Samadhi. Suryanamaskara . Description of Shatkarmas - Dhauti, Basti, Neti, Trataka, Nauli, and Kapalabhati.Bandha - procedure and benefits of Mulabandha, Jalandharabandha and Uddiyanabandha. Mudras - Shanmukhi mudra and Jnana mudra. Shatchakras and their importance in Yoga practice. Description of Ida-Pingala-Sushumna nadis and their importance in yoga practice.Concept of Moksha according to Charaka , Muktatmalakshana and Moksha upayas.Importance of International Day of Yoga (IDY).	2	18	22	6

	Adverse effects of improper Yoga practices				
10	**Naturopathy** Basic principles of Naturopathy. Concept of Panchabhutopasana.Therapeutic effects of Mud therapy. Therapeutic effects of Sun bath. Fasting therapy - its types and benefits. Hydrotherapy - types of water used based on the temperature and therapeutic effects of Hydrotherapy. Therapeutic effects of Massage	2		5	4
Total Marks			**100**	**75 hr**	**37 hr**

Paper 2 Public health					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
11	**Janapadodhwamsa / Maraka Vyadhi** Causes of Janapadodhwamsa/ maraka vyadhi. Manifestation and control measures of Janapadodhwamsa.Principles and uses of epidemiology. Dynamics of disease transmission.Theory of disease causation - epidemiological triad and natural history of disease.Concept of prevention, modes of intervention, risk factors, incidence and prevalence.Susceptible host and host defense. Immunizing Agents. Concept of vyadhikshamatwa.Investigation of an epidemic. Prevention and control of an epidemic. Sankramaka roga as per Ayurveda.Epidemiological determinants, brief pathology ,transmission, incubation period , clinical features, diagnosis and preventive measures of 1. Droplet Infections such as Chicken Pox, Measles, Rubella, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Covid-19 and Leprosy. 2. Water borne Infections / intestinal infections - Cholera, Polio, Viral Hepatitis, Typhoid. 3. Intestinal infestations – Ascariasis, Hook worm and Tape worm. 4.Emerging and re-emerging diseases. Explain Role of Ayurveda in Epidemics like COVID-19, Zika Virus , H1N1,H3N2,etc,. 5.Sexually transmitted diseases (STDs) with prevention and control - HIV/ AIDS, Syphilis and Gonorrhea. Role of Ayurveda in the prevention and control with recent research updates of Lifestyle diseases such as DM, Obesity, Coronary artery disease (CAD) and Cancer. Epidemic Diseases (Amendment) Ordinance Act,2020 .,	2	10	37	10
12	**Environmental health** **Air:** Properties of Vayu and composition of air. Changes in	2	16	10	5

	air of the occupied room. Comfort zone and indices of thermal comfort. Air pollution -causes, prevention and control. Effects of air pollution on health and social aspects .Effects of Global warming with recent updates. Definition of ventilation and types of Ventilation. Effects of high altitude and mountain air on health.**Water :** Safe and wholesome water and water requirements. Properties of water from different sources. Water pollution and health hazards. Contemporary and Ayurvedic methods of water purification. Hard Water - its effects on health and methods of removal of hardness. Quality of water stored in different vessels as per classics. Rain water harvesting - methods and its importance.**Soil :** Types of soil and relation between soil and health. Land pollution - its prevention and control. Land purification as per the classics. Social goals of Housing and Housing standards. The Building and other construction workers (Regulation of employment and conditions of services) Act, 1996 Effects of housing on health. Overcrowding and its impact on health. **Light:** Good lighting, natural lighting and artificial lighting. Biological effects of lighting.**Noise :** Definition of noise and its sources, effects on health and control measures. **Radiation:** Radiation - sources and effects on health and control measures.**Waste disposal :** Types of solid waste, Storage and collection of refuse. Methods of disposal of solid waste (Rural & urban). Excreta Disposal methods & Sanitary Latrines. Modern Sewage disposal methods. Disposal methods of Excreta during camps, fairs, and festivals. Bio-medical waste management and Bio-medical waste management rules, 2016. Environment protection Act,1986.				
13	**Disaster management** Definition of disaster and disaster management. Effects of natural and man-made disasters.Epidemiologic surveillance and disease control measures.	2		1	2
14	**Occupational Health** Definition of occupational health and Ergonomics. Occupational Hazards and Occupational diseases. Prevention and control of Occupational diseases . ESI Act ,1948 and The factories Act.1948. Role of Ayurveda in various Occupational health problems. The Merchant Shipping / Medical Examination Rules,2000	2	20	3	3
15	**School health services** Health problems of school children. Aspects of school health services.Duties of school medical officers. Healthy environment in the school.	2		2	3
16	**Disinfection**	2		2	3

	Definition of different term used in relation to disinfection. Types of disinfection. Natural agents, Physical agents and Chemical agents of disinfection. Recommended disinfection procedures of feces & urine, sputum, and room. Ayurvedic disinfection methods.				
17	**Primary health care** Definition of Primary Health Care. Principles and elements of primary health care. Levels of health care. Structure of Primary health care at village, sub-center, Primary health center (PHC), Community health center (CHC) and Rural hospital levels. Primary health care in Health insurance, Private agencies, Voluntary health agencies, NGOs and the AYUSH sector. Role of Ayurveda in Primary Health Care.	2	20	2	1
18	**Mother and Child health care** Objectives of Maternal and Child Care services. MCH problems & indicators of MCH care.	2		1	1
19	**Family welfare programme** Definition of Demography and sources of demographic statistics in India. Demographic cycle & definition of life expectancy.Definition of family planning, eligible couple and target couple. Objectives of family planning. Problems of population explosion . National population policy.Methods of Contraceptive (Fertility Regulating Methods).	2		2	2
20	**Preventive Geriatrics** Health problems of the aged and prevention and control measures. Relation between lifestyle and healthy aging. Role of Rasayana in preventive geriatrics.	2		1	1
21	**World Health Organization and International health agencies** Definition of World Health organization. Structure, regions, and works of the World Health Organization. Functions of various international health agencies - United Nations health agencies, Bilateral health agencies and Non- Governmental agencies. Contribution of the World health organization to the global acceptance of Ayurveda.	2	19	3	1
22	**Vital Statistics** Definition of Vital Statistics. Sources of Vital statistics. Fertility , Morbidity and Mortality rates. Registration of Birth and Death Act, 1969	2		1	1
23	**Health Administration** Health administration including AYUSH at the Central, State, District, and Village levels.	2		2	1
24	**National Health Programmes**	2	15	7	3

	National Health Programs : Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio , National TB Elimination program , Vector born disease control program, RCH program, ICDS program, Universal Immunization program, National mental health program , National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) , Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission (NRHM&NUHM), National AYUSH Mission (NAM).National nutrition programs: National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwadi nutrition program.				
25	**National Health Policy** National Health Policy (NHP) and the scope of Ayurveda in NHP.	2		1	1
Total Marks			**100**	**75 hr**	**38 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1 Principles of Swasthavritta, Yoga and Naturopathy									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Swastha and Swasthya (Lecture :3 hours, Non lecture: 0 hours)									
CO1	Define Swasthavritta and describe its objective.	CK	MK	K	L	TT-Theory	S	I	
CO1	Describe and compare Swasthalakshanas Arogyalakshanas,Dhatusamyalakshanas. Describe Concept of Health & Operational definition of health.	CC	MK	K	L&PPT	TT-Theory	S	I	
CO1	Describe the Importance of Shodhana in Swastha in relation to Sanchita& Asanchitha Dosha & Classify Swastha purusha as Sanchita dosha and Asanchita Dosha.	CC	MK	KH	L	M-CHT	S	I	
CO1	Explain the Physical, Mental and Social dimensions of health.	CK	MK	KH	L&GD	T- EW	S	I	
CO1,CO2	Describe the objective component of well-being - standard of living and level of living and subjective component of well-being - Quality of Life.	CK	MK	KH	L	T- EW	S	I	
CO1,CO2,CO7	Explain one health concept / Vasudhaiva Kutumbakam" or "One Earth · One Family One Future"	CK	DK	K	L	T- EW	F	I	

Topic 2 Healthy Life style -Dinacharya (Daily regimen) (Lecture :8 hours, Non lecture: 5 hours)									
CO1,CO2	Explain the Primordial, Primary, Secondary, and Tertiary Preventive measures in the context of Ayurveda with examples	CK	MK	KH	L&PPT,SDL	TT-Theory	F&S	I	
CO1,CO2	Explain the importance of Ahara and Vihara as the health promotive and disease preventive measures.	CK	MK	KH	L&PPT	TT-Theory	S	I	
CO1,CO2	Describe the importance of **Niyata kala vihara (**Dinacharya, Ritucharya) and **Aniyata kala Vihara** (Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadi asparshanaa) for health promotion and disease prevention.	CAN	MK	KH	L&PPT	T- EW	S	I	
CO1,CO2	Explore and analyse the concept of waking up at 'Brahma muhurta'in the present scenario and the effect of early rise on health, sleep, alertness and memory	CAN	DK	KH	IBL	DEB	F	I	
CO1,CO2	Describe the time, quantity and benefits of 'Usha Jalapana' (Drinking water in early morning).	CC	MK	K	L&PPT	T- EW	S	I	
CO1,CO2	Explain the Importance of Malatyaga in vata kaala - early morning (Good Bowel Habits)	CK	MK	KH	L&PPT	TT-Theory	S	I	
CO1,CO2	Explain the procedure, dravyas and benefits of Mukhaprakshalana and face washes used currently.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe the time, procedure, benefits, contraindications and herbs used as per rasa for dantadhavana and modern-day brushing techniques and dentifrices.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe jihwanirlekhana, explain the tools used in today's era and their benefits.	CAP	MK	KH	SDL	TT-Theory	F&S	I	
CO1,CO2	Explain the Anjana dravyas for Swastha and their benefits	CK	MK	K	L	INT	F&S	I	V-

									SHL
CO1,CO2	Describe the occupation /activity in which Anjana can be used as a health promotive measure	CS	NK	KH	SDL	O-QZ	F	I	
CO1,CO2	Explain the dravyas used with their doses for Pratimarsha Nasya and their benefits.	CC	MK	KH	L&PPT	T- EW	F&S	I	V-PC
CO1,CO2	Describe the various kaal for administering Pratimarsha Nasya as per day and season (ritu)	CAP	MK	KH	L&PPT	P-VIVA	F&S	I	V-PC
CO1,CO2	Describe the occupation /activity in which Pratimarsha Nasya can be used as a health promotive measure.	CAP	MK	KH	L&GD	INT	F&S	I	V-PC
CO1,CO2	Describe the ingredients, procedure and benefits of kavala and gandusha for oral hygiene including mouthwashes available in the market	CAP	MK	KH	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Mention different snehas/oils to be used for daily abhyanga as per seasons and geographical variations.	CK	MK	K	L&PPT	INT	F&S	I	
CO1,CO2	Justify the importance of the classical tambula by comparing it with the present-day betel chewing.	CE	DK	KH	TBL	TT-Theory	F	I	
CO1,CO2	Explain the practical application of Prayogika Dhoomapana (inhalation of herbal fumes/ herbal inhalers) with their benefits and contraindications	CAP	MK	SH	BL	TT-Theory	S	I	
CO1,CO2	Explain the ill effects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health	CAP	MK	KH	ECE	P-CASE	F&S	I	
CO1,CO2	Describe the applied aspects of Sarvanga Abhyanga, Padabhyanga, Shiroabhyanga and	CAP	MK	KH	DIS	T- EW	F&S	I	V-PC
CO1,CO2	Explain the application of Abhyanga according to different age groups and occupation/activity.	CAP	DK	KH	SDL	T-CS	F	I	V-PC

CO1,CO2	Explain the indications, contraindications and benefits of Vyayama.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe the types & benefits of vyayama and present-day practices such as aerobic exercises, muscle strengthening exercises etc.to be practiced as per prakriti, age and occupation.	CAP	MK	KH	DIS	CR-RED	F&S	I	
CO1,CO2	Describe the assessment of ardhashakti lakshanas of vyayama and the consequences of ati vyayama.	CE	MK	KH	DIS	TT-Theory	F&S	I	
CO1,CO2	Describe and compare the dravyas, benefits, and application of Udvartana, Udgharshana and Utsadana.	CAN	MK	KH	L&PPT	M-CHT	F&S	I	V-KC
CO1,CO2	Explain the physiological effects of snana on body and mind and explain the reasons for contraindications of Snana.	CAN	MK	KH	L&PPT	CR-W	F&S	I	
CO1,CO2	Explain the importance and benefits of Anulepana.	CK	MK	KH	L&PPT	P-VIVA	F&S	I	
CO1,CO2	Describe the merits and demerits of present-day applications like face powder, face pack, balm, lotions, lipsticks, deodorants and perfumes.	CAP	NK	KH	PrBL	CL-PR	F	I	
CO1,CO2	Explain the importance of proper clothing (vastradharana) in social life.	CK	MK	KH	L&PPT	INT	F&S	I	
Topic 3 Ratricharya (Lecture :6 hours, Non lecture: 1 hours)									
CO1,CO2	Describe ratri bhojanvidhi and its relation to health.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Describe ratri shayana vidhi in relation to the proper time of sleep.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain the relation between Nidra and health.	CK	MK	KH	L&PPT	T- EW	F&S	I	

CO1,CO2	Describe effects of Yukta & Ayukta nidra.	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain the effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra and Akala Nidra.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Identify Ahara and Vihara Causing sound sleep as well as disturbed sleep.	CAN	DK	KH	SDL	INT	F	I	
CO1,CO2	Formulate the duration of sleep according to age, Sleep in healthy and ailing persons.	CE	DK	KH	SDL	INT	F	I	
CO1,CO2,CO8	Explain various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defense d. Master Circadian Clock and Master Circadian Rhythm e. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle	CK	DK	KH	L&PPT	C-INT	F	I	
CO1,CO2,CO8	Explain Sleep apnoea , insomnia, narcolepsy and restless leg syndrome. Explain solutions to Asatmya jagarana (sleep disorders .)	CK	DK	KH	L&PPT	C-INT	F	I	
CO1	Explain the importance of observing brahmacharya and abrahmacharya in relation to health	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
CO1	Describe Brahmacharya with specail reference to lifestyle guidelines	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
CO1	Describe reproductive and sexual health according to Ayurveda	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
Topic 4 Ritucharya (Lecture :5 hours, Non lecture: 2 hours)									

CO1	Explain classification of kaala , distinguish Adana kala and visarga kala , identification of seasons based on the ritu lakshanas in different geographical areas.	CAP	MK	K	L&PPT	M-CHT	F&S	I	
CO1	Analyse the Sanchaya- Prakopa- Prashamana of Dosha with their gunas in each ritu.	CAN	MK	K	L&PPT	PUZ	F&S	I	
CO1	Describe the Relation of Agni , Bala and Ritu with its application.	CAP	MK	K	L&PPT	CL-PR	F&S	I	
CO1	Explain ritu shodhana for the prevention of diseases.	CC	MK	KH	L	T- EW	F&S	I	
CO1	Analyse Pathya - Apathya in regards to Ahara -Vihara in all six ritus in present scenario.	CAN	MK	K	FC	CL-PR	F&S	I	
CO1	Explain the importance of ahara and vihara in ritu sandhi and yamadanshtra kala.	CK	MK	KH	SDL	T- EW	F&S	I	
CO1	Describe rituharitaki as a rasayana with research updates.	CE	DK	K	SDL	CR-RED	F	I	
CO1	Explain the effects of Rituviparyaya on health and its relation to janapadaudhwansa/maraka vyadhis with present day examples.	CAP	MK	K	L&PPT	CL-PR	F&S	I	
Topic 5 Roganutpadaniya (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2	Explain vegadharana and vega-udirana in relation to health and morbidity.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Compare the symptoms and management principles of adharaniya vega janya vyadhis from bruhattrayee.	CAN	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain with examples the concept of vega-udirana (viz. Use of snuffing powder, forcible evacuation of bowels & bladder etc.).	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO2	Explain the importance of dharaniya vegas in promotion of	CK	MK	K	L&PP	T- EW	F&S	I	

	mental health.				T				
Topic 6 Sadvritta (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Describe digital health	CK	DK	KH	L&GD	TT-Theory	F&S	I	
CO1,CO2	Explain Promotion of Digital health	CAP	DK	KH	L&GD	TT-Theory	F&S	I	
CO1,CO2	Describe Digital health problems	CAP	DK	KH	DIS	PP-Practical	F&S	I	V-SHL
CO1,CO2	Understand and adopt the Sadavritta measures for the maintenance of personal ,social and spiritual health.	AFT-VAL	DK	D	RP	INT	F	I	
CO1,CO2	Explain how the observance of Sadvritta helps for the prevention of Adharma.	CC	MK	KH	DIS	T- EW	F&S	I	
CO1,CO2	Describe 'Achara Rasayana" and its role in the prevention and control of diseases.	CK	MK	K	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Explain characteristics of a mentally healthy person, warning signals of poor mental health, types of mental illness and causes of mental ill-health.	CK	MK	K	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Describe the mental health services and comprehensive mental health programme.	CK	MK	K	L&PPT	TT-Theory	F&S	I	
CO1,CO2	Explain the role of trigunas and satvavajaya in mental health promotion in present era.	CAP	DK	KH	CBL	INT	F	I	V-KC
Topic 7 Ahara (Lecture :20 hours, Non lecture: 15 hours)									
CO1	Explain significance of Ahara for health and well-being according to Ayurveda & Contemporary science Explain	CK	MK	K	L	T- EW	F&S	I	

	significance of Ahara for health and well-being according to Ayurveda & Contemporary science								
CO1	Classify aharadravyas as per Ayurveda & Contemporary science	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Enumerate and explain the features of Ahara vidhividhana, Ahara sevanakala &Dwadashashanapravicharana .	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Discuss the applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Discuss the Ahara &vihara leading to Santarpanajanya evam Apatarpanajanyavyadhi and importance of upavasa and effects of practice of intermittant fasting on health	CAN	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Explain the benefits of Shadrasabhojana	CAP	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Enumerate and explain the importance of Ashtaharavidhiviseshayatanani in present era	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Explain the importance of Nityasevaniyadravyas in the maintenance of health	CAP	MK	KH	L&PPT	T- EW	F&S	I	H-DG
CO1	Explain the properties (Guna& karmas) of Ahara dravyas in the following vargas with their nutritive value:Dhanyavarga – Shuka Dhanya (Cereals and Millets), Shami Dhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegatables), Kanda varga (roots and tubers), Phalavarga (Fruits), Taila varga (Fats and Oils), Ikshuvarga (Sugarcane Products)&Madyavarga(Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara UpayogiVarga (Spices & Condiments), Kritannavarga(Prepared Food), Mamsavarga (Meat types) and JalaVarga	CC	MK	KH	L&PPT	T- EW	F&S	I	H-DG

CO1	Define Pro-biotics and Pre-biotics and explain their utility	CK	DK	KH	IBL	INT	F	I	
CO1	Explain the Proximate principles of Food, Recommended Daily Allowance according to various conditions, Sources, and deficiency diseases of Protein, Carbohydrate, Fats, Vitamins, and Minerals.	CC	MK	K	L_VC	COM	F&S	I	
CO1	Define Balanced diet and explain diet for an individual depending on age, body weight and physiological status and explain the Social Aspects of Nutrition	CK	MK	KH	L&GD	T- EW	F&S	I	
CO1	Explain Food hygiene, Sanitation of eating places, Preservation of food, Food handlers, Foodborne diseases, Food fortification, Food adulteration, and Food toxicants	CC	NK	KH	L&PPT,ML	P-REC,CHK	F	I	
CO1	Explain Milk Hygiene, Milk composition, Source of infection for Milk, Milk borne diseases, Clean and Safe milk and Pasteurization of milk	CC	DK	KH	L&PPT,ML	P-REC,CHK	F	I	
CO1	Explain Meat Hygiene, Meat inspection, Slaughterhouse and Freshness of fish and egg	CC	DK	KH	L&PPT,ML	P-REC,CHK	F	I	
CO1	Explain safety and hygiene measures for Fruits and Vegetables	CC	NK	K	ML	O-QZ	F	I	
CO1	Formulate a Pathya-Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus,Cardiovascular diseases andAcid peptic diseases	CAP	DK	D	SDL	P-REC,CHK	F	I	
CO1	Describe Food safety and standards regulation(Ayurveda Ahara Regulations), 2022 and Food safety and standards Act, 2006.	CK	NK	K	ML	INT	F	I	
CO1	Explain different Dietary Supplements and Ergogenic Aids	CK	NK	K	IBL	TT-Theory	F	I	
CO1	Explain the impact of different dietary patterns: Mediterranean	CC	NK	KH	L&G	INT	F	I	

	diet, Keto Diet, DASH diet, the MIND diet, Vegan diet, Ovo-lacto-vegetarian, pesco-vegetarian, plant-based diet, Intermittent diet, the Nordic diet, importance of organic foods, merits and demerits of genetically modified foods				D				
CO1	Describe the Slow and Fast foods . Explain the impact of cooking processes like boiling, steaming, sautéing, fermenting etc. (samskara) on health and effect of instant foods like Maggi etc,..	CC	NK	KH	DIS	TT-Theory	F	I	
CO1	Define Nutraceuticals, Nutrigenomics, Nutrigenetics	CK	DK	K	L&PPT	T- EW	F	I	
CO1	Explain the concept of Viruddhaahara with classical and modern-day examples and the application of this in the prevention of diseases	CK	MK	KH	ECE	T- EW	F&S	I	H-AT
Topic 8 Rasayana for Swastha (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Explain the importance of lifestyle counselling with its methods	CC	NK	K	L&GD	TT-Theory	F&S	I	
CO1	Define Rasayana and mention the benefits of Rasayana	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Classify the types of Rasayana with examples	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Explain Urjaskara Rasayanas as per age and occupations /Activities	CAP	MK	K	L&GD	T-CS	F&S	I	
CO1	Explain the antioxidant&immunomodulatory effects of Rasayana with reference to research articles	CC	NK	K	L&GD	CR-RED	F	I	
Topic 9 Yoga (Lecture :22 hours, Non lecture: 6 hours)									
CO1	Describe adverse effects of improper Yoga practices	CK	DK	KH	L&G	TT-Theory	F&S	II	

					D				
CO3	Describe Global importance of International Day of Yoga (IDY)	CK	NK	K	L&PPT	INT	F	II	
CO3	Explain the etymology / derivation of the word 'Yoga' .	CK	MK	K	L&PPT	T- EW	F&S	II	
CO3	Define Yoga according to Patanjali Yogasutras, Bhagavad Gita and Charaka Samhita.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO3	Distinguish between Rajayoga, Hathayoga and Karmayoga.	CAN	MK	KH	L&PPT	M-CHT	S	II	
CO3	Explain Yogabhyasa Pratibhandhakas and Yoga Siddhikarabhavas.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO3	Describe Mitahara and Pathya-apathyas during Yogabhyasa.	CC	MK	KH	L&PPT	T- EW	F&S	II	
CO3	Explain Panchakosha theory.	CC	MK	KH	L&PPT	M-POS	F&S	II	
CO3	List out the Ashtangas of Yoga.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO3	Describe Yama and Niyama with meaning according to Yogasutras and Hathayogapradipika.	CC	MK	K	L&PPT	T- EW	F&S	II	
CO3	Define Asana and explain the importance of asana. Distinguish between asana and physical exercise.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO3	Describe the procedure, benefits, indications, and contraindications of Standing Yoga Postures such as Ardhakatichakrasana, Padahastasana, Ardhachakrasana, and Trikonasana.	CC	MK	KH	L_VC	PRN	F&S	II	

CO3	Describe the procedure, benefits, indications and contraindications of Sitting Yoga postures such as Swasthikasana, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Decsribe the procedure, benefits, indications and contra indications of Supine Yoga postures such as Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana and Setubandhasana.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Describe the procedure, benefits, indications, and contraindications of Prone Yoga postures such as Bhujangasana, Shalabhasana, Dhanurasana, and Makarasana.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Describe the procedure, benefits and contraindications of Suryanamaskara.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Define pranayama and explain its types, benefits, time of practice, and avara-pravara-madhyamalakshanas.	CC	MK	KH	L&PPT	T- EW	F&S	II	
CO3	Describe the procedure of Nadishudhi Pranayama, its benefits, and Nadishudhilakshana.	CC	MK	KH	L_VC	PRN	S	II	
CO3	Enumerate the Kumbhakabhedas.	CK	MK	K	L&PPT	TT-Theory	S	II	
CO3	Describe the procedure and benefits of Suryabhedana, Ujjayi, Sheetali, Sitkari, Bhastrika, Bhramari,Murcha, and Plavini.	CC	MK	KH	L_VC	PRN	F&S	II	
CO3	Enlist Shatkarmas of Yoga , indications and their importance.	CK	MK	K	L&PPT	TT-Theory	S	II	
CO3	Describe the procedure, benefits, indications, contraindications, and precautions of Dhauti, Basti, Neti, Trataka, Nauli, and	CC	MK	KH	L_VC	T- EW	S	II	

	Kapalabhati.								
CO3	Explain the term bandha & Describe the procedure and benefits of Mulabandha, Jalandharabandha, and Uddiyanabandha.	CC	MK	KH	L_VC	T- EW	S	II	
CO3	Describe Mudras and explain the benefits of Shanmukhi mudra andJnana mudra .	CC	DK	KH	L_VC	T- EW	F	II	
CO3	Describe Shatchakras and explain their importance in Yoga practice.	CAP	DK	KH	L&PPT	T-OBT	F	II	
CO3	Describe Ida-pingala-sushumna nadis and their importance in yoga practice.	CAP	NK	K	L&PPT	T- EW	F	II	
CO3	Define Pratyahara and explain its importance in Yoga practice.	CAP	MK	KH	L&PPT	TT-Theory	S	II	
CO3	Define Dharana and explain its importance in Yoga practice.	CAP	MK	KH	L&PPT	TT-Theory	S	II	
CO3	Define Dhyana and explain its importance in Yoga practice.	CAP	MK	KH	L&PPT	TT-Theory	S	II	
CO3	Describe Cyclic Meditation and Mindfulness meditation and their benefits.	CAP	DK	KH	L&PPT,L_VC	CL-PR	F	II	
CO3	Define Samadhi and explain its types and importance.	CK	MK	K	L&PPT	TT-Theory	S	II	
CO3	Define Moksha according to Charaka and explain Muktatmalakshana and Moksha upayas.	CK	DK	K	L&GD	INT	F	II	
Topic 10 Naturopathy (Lecture :5 hours, Non lecture: 4 hours)									
CO3	Explain the basic principles of Naturopathy.	CK	DK	K	L&PP	INT	F&S	II	

					T				
CO3	Describe the concept of Panchabhutopasana.	CK	DK	KH	L&PPT	INT	F&S	II	
CO3	Explain the procedure and therapeutic effects of Mud therapy.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Explain the procedure and therapeutic benefits of Sun bath.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Explain Fasting therapy and its types and benefits.	CK	MK	KH	L&PPT	TT-Theory	F&S	II	
CO3	Explain hydrotherapy, types of water used based on the temperature and therapeutic effects of Hydrotherapy.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	
CO3	Describe types , methods and benefits of massage.	CAP	MK	KH	L_VC	TT-Theory	F&S	II	

Paper 2 Public health									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Janapadodhwamsa / Maraka Vyadhi (Lecture :37 hours, Non lecture: 10 hours)									
CO1	Understanding the Epidemic Diseases (Amendment) Ordinance	CK	MK	KH	L&G	TT-Theory	F&S	II	

	Act,2020 .,				D				
CO1	Explain the causes of Janapadodhwamsa/ maraka vyadhi State the manifestation and control measures of Jnapadodhwamsa Explain the importance of Panchakarma and Rasayana in preventing Janapadodhwamsa	CK	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Define Epidemiology, enumerate and describe the principles and uses of epidemiology.	CK	MK	KH	L&GD	T- EW	S	I	
CO3	Describe the basic terms of epidemiology.Explain and discuss the dynamics of disease transmission.Explain the theory of disease causation, epidemiological triad and natural history of disease.	CK	MK	KH	L&PPT	T- EW	S	II	
CO2	Explain the concept of prevention, modes of intervention, risk factors, incidence and prevalence.	CK	MK	KH	L&PPT	T-EMI	S	II	
CO2	Explain Susceptible host and host defense.Describe Immunizing Agents.Explain the concept of vyadhikshamatwa.Enlist methods to improve Vyadhikshamatwa.Classify Bala, enlist factors of Bala vriddhikara bhava.	CK	MK	KH	L&PPT	T- EW	F&S	II	
CO2	Explain the investigation of an epidemic. Explain prevention and control of an epidemic.	CK	MK	KH	L&PPT	T- EW	F&S	II	
CO1	Explain Sankramaka roga as per Ayurveda.	CK	MK	K	L&PPT	T- EW	S	II	
CO2	Explain Epidemiological determinants, brief pathology ,transmission, incubation period , clinical features, diagnosis and preventive measures of 1.Droplet Infections such as Chicken Pox, Measles, Rubella, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Covid-19 and Leprosy	CK	MK	KH	L&PPT,EDU,D_BED	T- EW	F&S	II	

CO2	2.Water borne Infections / intestinal infections - Cholera, Polio, Viral Hepatitis, Typhoid	CK	MK	K	L&PPT,D_BED	T- EW	S	II	V-KC
CO2	3.Intestinal infestations – Ascariasis, Hook worm ,Tape worm4. Emerging and re-emerging diseases.Explain Role of Ayurveda in Epidemics like COVID-19, Zika Virus , H1N1,H3N2,etc	CK	MK	KH	L&GD,D_BED	T- EW	S	II	
CO2	5.Sxually transmitted diseases (STDs) with prevention and control - HIV/ AIDS, Syphilis and Gonorrhea.	CK	MK	KH	L&GD,D_BED	T- EW	S	II	
CO2	Explain the role of Ayurveda in the prevention and control with recent research updates of Lifestyle diseases such as DM,Obesity, Coronary artery disease (CAD) and Cancer	CK	MK	KH	L&PPT,D_BED	T- EW	S	II	
Topic 2 Environmental health (Lecture :10 hours, Non lecture: 5 hours)									
CO1	Understanding the Environment protection Act,1986	CK	MK	KH	L&GD	TT-Theory	F&S	II	
CO1	Describe the properties of Vayu and state the composition of air.	CK	DK	KH	L	INT	F	II	
CO1	Specify the changes in air of the occupied room.	CK	DK	KH	L	INT	F	II	
CO1	Explain comfort zone and indices of thermal comfort.	CK	DK	KH	L	INT	F	II	
CO2	Comprehend the causes, prevention and control of air pollution. Discuss the effects of air pollution on health and social aspects	CC	DK	KH	L	DEB	F	II	
CO2	Elaborate the effects of Global warming with recent updates	CAP	DK	KH	L&GD	CR-RED	F	II	
CO2	Define ventilation and illustrate its types.	CAP	DK	KH	L&GD	DEB	F	II	

CO2	Explain the effects of high altitude and mountain air on health.	CAP	DK	KH	L&GD	DEB	F	II	
CO1	Explain safe and wholesome water and state water requirements.	CK	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1	Explain the properties of water from different sources.	CK	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1,CO6	Explain water pollution and health hazards.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO1,CO6	Describe the contemporary methods of water purification along with Ayurvedic methods.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO1,CO6	Elucidate the effects of Hard Water on health and methods of removal of hardness.	CAP	MK	KH	L&PPT,DIS	CL-PR	F&S	II	
CO7	Describe the quality of water stored in different vessels as per classics.	CAP	DK	SH	L	DEB	F	II	
CO7	Explain the rain water harvesting methods and its importance	CAN	NK	SH	L	DEB	F	II	
CO7	Enlist the types of soil.	CK	DK	KH	L&PPT	INT	F	II	
CO7	Interpret the relation between soil and health.	CK	DK	KH	L&PPT	INT	F	II	
CO7	Explain Land pollution and its prevention and control	CK	DK	KH	L&PPT	INT	F	II	
CO7	Explain land purification as per the classics.	CAN	NK	KH	L&GD	T-OBT	F	II	
CO7	Explain the Social goals of Housing and Housing	CE	DK	KH	L&G	T- EW	F	II	

	standards. Understanding of The building and other construction workers Act,1996				D				
CO7	Analyze the effects of housing on health.	CE	DK	KH	L&GD	T- EW	F	II	
CO7	Explain overcrowding and its impact on health	CE	DK	KH	L&GD	TT-Theory	F	II	
CO7	Explain good lighting, natural lighting and artificial lighting	CK	DK	KH	L&PPT	M-POS	F	II	
CO7	Explain the biological effects of lighting.	CK	DK	KH	L&PPT	M-POS	F	II	
CO7	Define noise. Illustrate its sources, effects on health and control measures.	CK	DK	KH	L&PPT	PRN	F	II	
CO7	Enlist the sources of Radiation and explain its effects on health and describe control measures.	CK	DK	KH	L	PRN	F	II	
CO7	Enlist Different types of solid waste and Explain the Storage and collection of refuse.	CK	MK	KH	L,D-M	TT-Theory	S	II	
CO7	Explain the Methods of disposal of solid waste (Rural & urban)	CK	MK	KH	D-M	M-MOD	S	II	
CO7	Describe Bio-medical waste management and Bio-Medical waste management rules, 2016	CK	MK	KH	D-M	TT-Theory	S	II	
CO7	Enlist excreta Disposal methods and explain Sanitary Latrines	CAN	DK	KH	D-M	DEB	F	II	
CO7	Explain the Modern Sewage disposal method	CAN	DK	KH	D-M	DEB	F	II	
CO7	Describe the disposal methods of Excreta during camps, fairs, and festivals	CAN	DK	KH	D-M	DEB	F	II	

Topic 3 Disaster management (Lecture :1 hours, Non lecture: 2 hours)									
CO5	Define disaster and explain disaster management	CK	DK	KH	L&GD	PRN	F	II	
CO5	Explain effects of natural and man-made disasters	CK	DK	KH	L&GD	PRN	F	II	
CO2	Explain epidemiologic surveillance and identify disease control measures	CAP	DK	KH	L&GD	PRN	F	II	
Topic 4 Occupational Health (Lecture :3 hours, Non lecture: 3 hours)									
CO1	Understand the Merchant Shipping / Medical Examination Rules, 2000	CK	DK	KH	L&GD	TT-Theory	F	II	
CO7,CO8	Define Occupational Health and Ergonomics.	CK	MK	K	L&GD	TT-Theory	F&S	II	
CO7,CO8	Explain occupational Hazards.	CK	MK	K	L&GD	T- EW	F&S	II	
CO7,CO8	Enlist occupational diseases and explain their prevention & control.	CK	MK	K	L&GD	T- EW	F&S	II	
CO1	Explain ESI Act, 1948 and The factories Act,1948	CK	MK	K	L&PPT	T- EW	S	II	
CO1	Describe the role of Ayurveda in various Occupational health problems.	CK	MK	KH	L&GD	TT-Theory	S	II	
Topic 5 School health services (Lecture :2 hours, Non lecture: 3 hours)									
CO2	State the Health problems of school children.	CC	MK	KH	L&PPT	T- EW	F&S	II	

CO2	Mention the aspects of school health services.	CC	MK	KH	L&PPT	T- EW	F&S	II	
CO2	Mention the duties of school medical officers.	CC	MK	KH	FV	T- EW	F&S	II	
CO2	Explain how to Maintain a healthy environment in the school.	CC	MK	KH	FV	T- EW	F&S	II	
Topic 6 Disinfection (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2,CO6,CO7	Define the term disinfection	CK	MK	K	L	TT-Theory	F&S	II	
CO1,CO2,CO6,CO7	Enlist and explain the types of disinfection.	CK	MK	K	L&PPT	P-VIVA,P-PS	F&S	II	
CO1,CO2,CO6,CO7	Describe the Natural agents, Physical agents, and chemical agents of disinfection	CK	MK	K	L&PPT	T- EW	F&S	II	
CO1,CO2,CO6,CO7	Demonstrate the recommended disinfection procedures of feces & urine, sputum, and room.	PSY-MEC	DK	KH	L_VC	P-VIVA,QZ	F	II	
CO1,CO2,CO6,CO7	Explain Ayurvedic disinfection methods.	CK	DK	K	L&PPT	QZ	F	II	
Topic 7 Primary health care (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2,CO3,CO4,CO5,CO8	Define Primary Health Care.	CK	MK	K	L	TT-Theory	S	II	
CO1,CO2,CO3,CO4,CO5,CO8	Describe the principles and elements of primary health care and the levels of health care.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO1,CO2,CO3,CO4,CO5,C	Describe the Structure at village, sub-centre, PHC, CHC, Rural hospital levels	CK	MK	K	L&PPT	T- EW	F&S	II	

O8									
CO1,CO2,CO3,CO4,CO5,CO8	Describe primary health care in Health insurance, Private agencies, Voluntary health agencies, NGOs, and the AYUSH sector	CK	DK	K	L&PPT	T-OBT	F	II	
CO1,CO2,CO3,CO4,CO5,CO8	Describe the role of Ayurveda in Primary Health Care.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
Topic 8 Mother and Child health care (Lecture :1 hours, Non lecture: 1 hours)									
CO2,CO3,CO8	Describe the objectives of Maternal and Child Care services.	CK	MK	K	L	T- EW	F&S	II	
CO2,CO3,CO8	Explain the MCH problems & enlist the indicators of MCH care	CC	MK	K	L&PPT	T- EW	F&S	II	
Topic 9 Family welfare programme (Lecture :2 hours, Non lecture: 2 hours)									
CO4,CO5,CO6	Define demography and enlist the sources of demographic statistics in India.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO4,CO5,CO6	Describe the demographic cycle & define life expectancy.	CK	MK	K	L&PPT	CL-PR	F&S	II	
CO2,CO4,CO5	Define family planning, eligible couple and target couple.Enlist & explain the objectives of family planning.	CK	MK	K	L&PPT	TT-Theory	F&S	II	
CO2,CO4,CO5	Explain the problems of population explosion and describe national population policy.	CK	MK	K	DIS	TT-Theory	F&S	II	
CO2,CO4,CO5	Classify and describe the Contraceptive methods (Fertility Regulating Methods).	CK	MK	K	L_VC	M-CHT	F&S	II	
Topic 10 Preventive Geriatrics (Lecture :1 hours, Non lecture: 1 hours)									

CO8	Enlist the health problems of the aged and explain their prevention and control measures	CK	MK	K	DIS	INT	F&S	II	
CO8	Explain the relation between lifestyle and healthy aging.	CC	MK	K	DIS	INT	F&S	II	
CO8	Describe the role of rasayana in preventive geriatrics.	CC	MK	K	L&PPT,W	INT	F&S	II	
Topic 11 World Health Organization and International health agencies (Lecture :3 hours, Non lecture: 1 hours)									
CO4	Define and describe the structure, regions, and works of the World Health Organization	CK	MK	KH	L&GD	T- EW,P-VIVA	F&S	III	
CO4	Describe the functions of various international health agencies - United Nations health agencies, bilateral health agencies, and Non- Governmental agencies	CK	MK	KH	L&GD	T- EW,P-VIVA	F&S	III	
CO4	Describe the contribution of the world health organization to the global acceptance of Ayurveda	CK	MK	KH	L&GD	T- EW,P-VIVA	F&S	III	
Topic 12 Vital Statistics (Lecture :1 hours, Non lecture: 1 hours)									
CO1	Understanding of Registration of Birth and Death Act, 1969	CK	MK	KH	L&GD	TT-Theory	F&S	II	
CO4,CO8	Define Vital Statistics. Enumerate the sources ofVital statistics	AFT-RES	MK	SH	DIS	T- EW,P-VIVA	F&S	III	
CO4,CO8	Describe Fertility , Morbidity and Mortality rates	AFT-RES	MK	SH	L&GD	T- EW,P-VIVA	F&S	III	

Topic 13 Health Administration (Lecture :2 hours, Non lecture: 1 hours)									
CO4,CO8	Describe the health administration including AYUSH at the Central, State, District, and Village levels	CK	DK	KH	L&GD	T- EW,P-VIVA	S	III	
Topic 14 National Health Programmes (Lecture :7 hours, Non lecture: 3 hours)									
CO4,CO8	State the vision/objective and outline the goals, strategies and plan of action of National Health Programs - Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio , National TB Elimination Program , Vector born disease control program, RCH program, ICDS program, Universal Immunization Program, National mental health program , National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) , Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission (NRHM&NUHM), National AYUSH Mission (NAM). National nutrition programs- National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwadi nutrition program.	CK	MK	KH	L&PPT,DIS,FV	T- EW,P-VIVA	F&S	III	
Topic 15 National Health Policy (Lecture :1 hours, Non lecture: 1 hours)									
CO4	Describe the National Health Policy (NHP) and the scope of Ayurveda in NHP.	CK	MK	KH	L,L&PPT	T- EW,P-VIVA	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	Dinacharya	1	25
2	Disinfectants	1	2
3	Ahara	1	30
4	Health Education (IEC)	2	10
5	Yoga performance	2	35
6	Community survey	3	20
7	Local Health Educational Visits	3	36
8	Visit to Observe National Health Programs and Ayurveda Centre	3	12
9	Monitoring of health and hygiene	1	5

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 Dinacharya									
CO1	Collect and Compare different Dantadhawana Churnas/ Tooth pastes available in the market and choose/ advise the appropriate one based on the need.	PSY-ADT	DK	D	PrBL	PRN	F	I	
CO1	Collect and Compare different JiwhaNirlekhanaYantra(Tongue cleaners) available in the local area/ market and choose/advise the appropriate one for swastha	PSY-ADT	DK	D	PrBL	PRN	F	I	
CO1	Collect different dravya/kashaya/mouthwashes available in the market for kavala and gandusha; demonstrate the procedure of kavala and gandusha with appropriate liquids /dravyas for swastha	PSY-ADT	MK	D	PrBL, D,PRA	PRN	F&S	I	
CO1	Collect different types of Anjana (Collyriums) available in the market, Demonstrate Anjana procedure as per local traditions and	PSY-ADT	MK	D	PrBL, PT,D	PRN	F&S	I	

	advise different types of Anjana for swastha.								
CO1	Demonstrate Pratimarsha Nasya with Anutaila/ Sesame oil and prescribe the appropriate taila for Pratimarsha Nasya for swastha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO1	Demonstrate Prayogika Dhoomapana and advise prayogika dhoomapana dravya for swastha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO1	Demonstrate the procedure of Abhyanga techniques for full body abhyanga, padabhyanga and shiroabhyanga and prescribe suitable taila for Abhyana for Swatha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO1	Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swatha.	PSY-ADT	MK	D	PrBL, PT,D	DOPS	F&S	I	
CO2	Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation /activity.	CE	MK	SH	PrBL	P-CASE	F&S	I	
CO2	Advise /counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five person and should be documented).	CE	MK	SH	PrBL	P-CASE	F&S	I	
Topic 2 Disinfectants									
CO7	Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants:Bleaching powder, Dettol, Lysol, Savlon.	PSY-ADT	MK	SH	CBL	PP-Practical	S	II	
CO7	Observe the procedure of fumigation of the operation theatre.	AFT-REC	NK	D	D	P-VIVA	F	II	
CO7	Write the mode of working and uses of an autoclave.	CK	DK	KH	SDL	T- EW	F	II	

Topic 3 Ahara									
CO8	Collect and compile different regional staple food articles.	PSY-SET	MK	D	SDL	COM	F	I	H-DG
CO8	Mention the nutritive value of the following preparations per 100gm and calculate the food portions/serving size of the following recipes: a. Yusha b.Yavagu c.Odana d.Krushara e.Peya f.Panaka g.Takra h.Manda i.Vilepi	CE	MK	D	PT	P-EN	F&S	I	
CO8	Plan a dietary Menu according to different Prakriti (preparation of diet chart considering all ahara vargas for eka doshaja , dvidoshaja prakriti)	PSY-GUD	MK	SH	TBL	P-MOD,P-POS	F	I	
CO8	Plan the dietary menu for different occupations / Activities, Age groups, and physiological conditions. (diet chart for 1-5 years child, 6-18 years,18& above till 60 years, above 60 years, sedentary, sedentary intellectuals, night shifts , drivers, standing professionals. physiological conditions like Garbhini,Sutika, Kshirapa, Ksheerada, Ksheerannada, Annada etc,..)	PSY-GUD	MK	D	CBL	P-CASE	F&S	I	
CO8	Plan Ahara-Vihara based on the different Ritus(preparation of diet and lifestyle charts for each ritu)	PSY-GUD	MK	D	PrBL	M-CHT	F	I	
CO8	Plan a dietary menu for any one individual according to prakriti, agni, Sara, satva, age, sex, occupation/ activity, and season based on the regional food habits with serving sizes with different food exchange/options.	PSY-GUD	MK	D	IBL	P-CASE	F	I	
CO8	Document the maintenance of various equipment and appliances used in the kitchen/ diet section of the hospital such as cooking gas, pressure cooker, mixer-grinder, microwave oven, refrigerator	AFT-RES	NK	D	PL	PP-Practical	F	I	

CO8	Assess various Anthropometric variables like Weight, height, and BMI (including differentiation between Sara)and Mid-arm Circumference in order to assess the state of nutrition.	AFT-RES	MK	D	PSM	PP-Practical	F	I	
Topic 4 Health Education (IEC)									
CO5	Demonstrate communication methods for health education.	PSY-SET	MK	SH	DIS, W	P-RP,M-POS,OSPE ,DOPS	F&S	II	
CO5	Demonstrate/present different health education materials (dinacharya practices, sadvritta practices,family planning methods, breast feeding techniques, environmental hygeine, preventive and control measures of comuunicable and non - communicable diseases etc.) to the target population in the community.	AFT-RES	MK	SH	DIS,TPW,RP	DOPS,Log book	F&S	II	
Topic 5 Yoga performance									
CO3	Perform four Standing Postures namely - Ardhakatichakrasana, Padahastasana, Ardhachakrasana, and Trikonasana step by step with Sthiti, main procedure, and vishrama.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform eleven Sitting Postures namely - Swasthikasana, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana step by step with Sthiti, main procedure, and vishrama.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform seven Supine Postures namely - Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana, and Setubandhasana step by step with Sthiti, main procedure and visrama	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform four Prone Postures namely - Bhujangasana,	PSY-	MK	SH	KL	DOPS	S	II	

	Shalabhasana, Dhanurasana, and Makarasana step by step with Sthiti, main procedure and vishrama.	ADT							
CO3	Perform Nadishuddhi Pranayama with inhalation-retention-exhalation in the ratio of 1:4:2 in a comfortable sitting posture.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform Kumbhakabhedas namely - Suryabhedana, Ujjayi, Sitkari, Sheetali, Bhastrika and Bhramari.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Perform Jalaneti, Kapalabhati and Trataka.	PSY-ADT	MK	SH	KL	DOPS	S	II	
CO3	Demonstrate and instruct Common Yoga Protocol of IDY (International Day of Yoga).	PSY-ADT	DK	SH	EDU	DOPS	F	II	
Topic 6 Community survey									
CO6	Conduct minimum 05 Family surveys using structured questionnaire in specific rural populations and report the survey finding and discuss possible solutions to the family	PSY-SET	MK	D	ECE	DOPS	F&S	III	
CO6	Conduct minimum 05 Family surveys using structured questionnaire in specific urban populations and report the survey finding and discuss possible solutions to the family.	PSY-SET	MK	D	ECE	DOPS	F&S	III	
Topic 7 Local Health Educational Visits									
CO2	Report the functioning of milk dairy such as methods of processing and preservation of milk, testing of milk before and after pasteurization and the standards of milk & milk products.	PSY-SET	MK	KH	EDU, FV	P-VIVA,RK	F&S	III	
CO2,CO7	Report and explain the various process involved in large-scale water purification.	PSY-MEC	MK	KH	D-M,FV	P-VIVA,RK	F&S	III	
CO2,CO7	Explain and Report the processes involved in modern sewage treatment.	PSY-MEC	MK	KH	D-M,FV	P-EXAM,RK	F&S	III	

CO1,CO2,CO5,CO6,CO8	Explain and report the various measures adopted in the industry for the prevention and control of occupational diseases.	CC	MK	KH	TPW, FV	P-VIVA,RK	F&S	III	
CO1,CO2,CO8	Explain and Report the food safety standards and methods of food processing techniques.	CC	MK	K	PrBL, RLE, FV	P-VIVA,RK	F&S	III	
CO3,CO6	Report and explain various naturopathic treatment methods.	CC	MK	KH	L_VC ,EDU, FV	P-EXAM,RK	F&S	III	
Topic 8 Visit to Observe National Health Programs and Ayurveda Centre									
CO4,CO8	Report the functioning of National Health Programs at Primary health centers/Community health centers/District hospitals and Govt. Ayurveda Dispensary	PSY-SET	MK	SH	L_VC ,IBL, FV	T- EW,P-VIVA,RK	F&S	III	V-KC
CO4	Report the functioning of a Primary Health Centre/ Community Health Centre/ Rural Hospital/ District Hospital with regards to the implementation of different National Health Programmes viz. infectious disease control, immunization, ANC, Family planning etc.	AFT-RES	DK	D	FV	Log book	F	III	
CO4	Report the structure and functioning of an Ayurvedic Dispensary/ Taluk Hospital/ District Hospital available in the district.	AFT-RES	DK	D	FV	Log book	F	III	
Topic 9 Monitoring of health and hygiene									
CO2,CO6,CO7,CO8	Collect the demographic profile of allotted 2 subjects/Individuals (one from the community and one from employees of the college/hospital) and conduct clinical examination (Assess Prakriti, Sattva, Saara, etc.)	AFT-RES	MK	D	IBL	P-CASE,RK	F&S	I	
CO2,CO6,CO7,CO8	Conduct periodic check-ups for allotted individual/employer (2) health status / occupational health status and if any treatment	AFT-RES	MK	D	PT	P-CASE,OSCE	F	I	

	is prescribed then coordinate the treatment under the overall guidance of the Mentor								
CO2,CO6,CO 7,CO8	Counsel the adopted individuals/employer (2) and analyze the health trajectory(individual following the prescribed regimen) of the adopted individual/employer under the overall guidance of the mentor	AFT-RES	MK	D	PT	P-SUR,RK	F	II	
CO2,CO6,CO 7,CO8	Document the maintenance of water sanitation, waste disposal, food hygiene, etc,. in the hospital canteen/ pathya section/cafeteria	CE	MK	KH	PrBL	RK	F	I	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	Dinacharya	1	1. Analyze the composition of different Dantadhawana Churnas/ Tooth pastes and tooth brushes available in the market 2. Analyze different Jivwa NirlekhanaYantra(Tongue cleaners) available in the local area/ market 3. Demonstrate the procedure of kavala and gandusha with appropriate liquids /dravyas for swastha 4. Demonstrate Anjana procedure as per local traditions and advise different types of Anjana for swastha. 5. Demonstrate Pratimarsha Nasya with Anutaila/ Sesame oil and prescribe the appropriate taila for Pratimarsha Nasya for swastha. 6. Demonstrate Prayogika Dhoomapana (Practicable and Non- practicable Dhoomapana)and advise prayogika dhoomapana dravya for swastha. 7. Demonstrate the procedure of Abhyanga techniques for full body abhyanga, padabhyanga and shiroabhyanga and prescribe suitable Taila for Abhyana for Swatha. 8.Demonstrate the procedure of Udwartana techniques and prescribe suitable dravya for Udwartana for Swatha. 9.Prescribe appropriate dinacharya module regarding ahara and vihara as per age and occupation /activity. 10.Advise /counsel people regarding healthy lifestyle based on the Ayurvedic principles (one student should counsel at least five person and should be documented).	25
2	Disinfectants	1	Identify and demonstrate the suitability, dose, dilution, and contact period of the following disinfectants : Bleaching powder, Dettol, Lysol, Savlon . Observe the procedure of fumigation of the operation theatre. Write the mode of working and uses of an autoclave.	2

3	Ahara	1	Collect, compile and document region wise different varieties of Ahara Varga (Millets, cereals, pulses, vegetables, varieties of milk/oil/honey/ available in the market). Demonstrate the therapeutic indication and nutritive values of Pathya kalpanas a. Manda b. Peya c. Vilepi d.Yavagu e.Odana f. Krishara g.Yusha h.Takra . Prepare the dietary regime according to different Prakriti. Prepare/Prescribe the dietary regime for different occupations / activities, age groups, and physiological conditions. Prepare/Prescribe the diet and lifestyle regimen(pathya- apathya) with reference to Ahara and Vihara for each ritu. Conduct diet counselling according to prakriti, agni, sara, satva, age, sex, occupation/ activity, and prevailing season based on the regional food habits with serving sizes with different food exchange/options for 5 persons. Assess various anthropometric variables like weight, height, and BMI and mid-arm circumference etc., in order to assess the state of nutrition of five individuals.	30
4	Health Education (IEC)	2	Demonstrate communication methods for health education. Demonstrate/ Present different health education materials (dinacharya practices, Sadvritta practices, family planning methods, breastfeeding techniques, etc.) patients and general public .	10
5	Yoga performance	2	Perform four Standing Postures namely - Ardhakatichakrasana, Padahastasana, Ardhachakrasana, and Trikonasana step by step with sthiti, main procedure and vishrama. Perform eleven Sitting Postures namely - Swasthikasana,Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, Ardhamatsyendrasana, and Siddhasana step by step with sthiti, main procedure and vishrama. Perform seven Supine Postures namely - Pavanamuktasana, Sarvangasana,	35

			Matsyasana, Halasana, Chakrasana, Shavasana, and Setubandhasana step by step with sthiti, main procedure and visrama Perform four Prone Postures namely - Bhujangasana, Shalabhasana, Dhanurasana, and Makarasana step by step with Sthiti, main procedure and vishrama. Perform Jalaneti and kapalbhati . Perform Anuloma – Viloma Pranayama in a comfortable sitting posture. Perform Nadishuddhi Pranayama with inhalation-retention-exhalation in the ratio of 1:4:2 in a comfortable sitting posture. Perform Kumbhakabhedas namely - Suryabhedana, Ujjayi, Sitkari, Sheetali, Bhastrika and Bhramari. Demonstrate and instruct Common Yoga Protocol of IDY (International Day of Yoga).	
6	Community survey	3	Conduct minimum 05 Family surveys using a structured questionnaire in specific rural populations and report the survey findings and discuss possible solutions to the family. Conduct minimum 05 family surveys using a structured questionnaire in specific urban populations and report the survey findings and discuss possible solutions to the family.	20
7	Local Health Educational Visits	3	Report the functioning of milk dairies such as methods of processing and preservation of milk, testing of milk before and after pasteurization, and the standards of milk & milk products. Report the various process involved in water purification plant. Report the processes involved in modern sewage treatment plant. Report the various measures adopted for the prevention and control of occupational diseases in any industry. Report the food safety standards and methods of food processing techniques adopted in any food industry. Report the various treatment modalities adopted in Naturopathy and Yoga canters. Note : Swasthavritta, Agada Tantra.	36

			Dravyaguna & Rasashastra - Combined out campus visits can be palled wherever feasible.	
8	Visit to Observe National Health Programs and Ayurveda Centre	3	Report the functioning of a Primary health centre/Community health centre/Rural hospital/District hospital with regards to the implementation of different National Health Programmes viz. infectious disease control, immunization, ANC, Family planning etc. Report the structure and functioning of a Ayurveda Dispensary/ Taluk Hospital /District Hospital available in the district.	12
9	Monitoring of health and hygiene	1	Conduct periodic check-ups , collect demographic profile and clinical examination of allotted 2 subjects/Individuals - Assess Prakriti, Satva, Sara, etc.)for their health status / occupational health status and if any treatment is prescribed then coordinate the treatment under the overall guidance of the teacher/Mentor. Counsel and advice the allotted 2 subjects a healthy regime prescription and analyze their health status after following the healthy regime under the overall guidance of the teacher/mentor. Document the maintenance of water sanitation, waste disposal including biomedical waste in the hospital.	5
			Total Hr	**175**

Activity

CO	Topic name	Activity Details	Hours #
CO1	Dinacharya	Demonstration, Making posters, Real-life experiences , Roleplay , We- based activities	5

		Example - Collection and analyze of different tooth paste/tooth brushes, mouth washes and collyriums available in the market including GMP pharmacies	
CO1	Ratricharya	Chart preparation and real-life experiences of Ratri bhojana and Sleep principles	1
CO1	Ritucharya	Assessment of changes happening in the human body in particular rituPoster preparation of food recipes in different ritus	2
CO1	Sadvritta	Role play	1
CO1	Ahara	Listing of Ahitakara (Junk) food habits, Gathering information of Organic farming and Organic food items , Application of Ashtaahara vidhivesesha ayatana in real life - Team base project, Roleplay , Presentation & Collection of Research updates in the field of Ayurvedic food	15
CO1	Roganutpadaniya	Survey and documentation on effect of Adharaneeya vega on different occupations	1
CO1	Rasayana for swastha	Poster making and Library work	2
CO1	Nidra	Survey on sleep and awakening patterns among the staff and students	1
CO7	Yoga	Participation in International day of Yoga , Poster presentation of Yogic practices as per diseases , Preparation of Short videos on Yoga and Conducting Quiz	7
CO2,CO5	Disaster management	Group discussion	2
CO1	Janapadodwamsa	Assignment , Symposiums and Problem-based learning	10
CO1,CO5	Environmental health	Seminars, Quiz andm PBL	5
CO3	Disinfection	PBL	3
CO2	Family welfare programe	Roleplay , Web-based learning and Discussion	2

CO7,CO8	Mother and child health care	PBL	1
CO8	Preventive geriatrics	Group discussion and Seminar	1
CO4,CO8	National health programs	Web-based learning , Assignments and Participating in celebration of health related days	3
CO3	School health services	Role play and Presentations	2
CO7,CO8	Occupational health	Poster making , PBL and Group discussion	3
CO2,CO3,CO4,CO5 ,CO8	**Primary health care**	Group discussions	2
CO3	Naturopathy	Web-based learning , Tutorials and Group disussions	4
CO4	World health organizations and International health agencies	Web-based learning and Quiz	1
CO8	Health Statistics	Presentations and Seminars	1

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	14
2	Lecture with Power point presentation	61
3	Lecture & Group Discussion	16
4	Lecture with Video clips	15

5	Discussions	6
6	Inquiry-Based Learning	1
7	Project-Based Learning	1
8	TBL	1
9	Flipped classroom	1
10	Blended Learning	1
11	ECE	1
12	Self-directed learning	8
13	Demo on Model	6

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SW	2	200	100	60	10	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 6	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-SW
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Principles of Swasthavritta, Yoga and Naturopathy						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**Swastha and Swasthya**	1	6	Yes	Yes	No
2	**Healthy Life style -Dinacharya (Daily regimen)**	1	38	Yes	Yes	Yes
3	**Ratricharya**	1		Yes	Yes	No
4	**Ritucharya**	1		Yes	Yes	Yes
5	**Roganutpadaniya**	1	13	Yes	Yes	No
6	**Sadvritta**	1		Yes	Yes	No
7	**Ahara**	1	20	Yes	Yes	Yes
8	**Rasayana for Swastha**	1	5	Yes	Yes	No
9	**Yoga**	2	18	Yes	Yes	Yes
10	**Naturopathy**	2		Yes	Yes	No
Total Marks			**100**			

Paper 2 Public health						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
11	**Janapadodhwamsa / Maraka Vyadhi**	2	10	Yes	Yes	Yes
12	**Environmental health**	2	16	Yes	Yes	Yes

13	**Disaster management**	2		Yes	Yes	No
14	**Occupational Health**	2	20	Yes	Yes	No
15	**School health services**	2		Yes	Yes	No
16	**Disinfection**	2		Yes	Yes	No
17	**Primary health care**	2	20	Yes	Yes	Yes
18	**Mother and Child health care**	2		Yes	Yes	No
19	**Family welfare programme**	2		Yes	Yes	No
20	**Preventive Geriatrics**	2		Yes	Yes	No
21	**World Health Organization and International health agencies**	2	19	Yes	Yes	No
22	**Vital Statistics**	2		Yes	Yes	No
23	**Health Administration**	2		Yes	Yes	No
24	**National Health Programmes**	2	15	Yes	No	Yes
25	**National Health Policy**	2		Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Swastha and Swasthya **2.** Healthy Life style -Dinacharya (Daily regimen) **3.** Ratricharya **4.** Ritucharya **5.** Roganutpadaniya **6.** Ahara **7.** Sadvritta **8.** Rasayana for Swastha **9.** Yoga **10.** Naturopathy **11.** Swastha and Swasthya **12.** Healthy Life style -Dinacharya (Daily regimen) **13.** Ritucharya **14.** Ratricharya **15.** Roganutpadaniya **16.** Sadvritta **17.** Ahara **18.** Rasayana for Swastha **19.** Yoga **20.** Naturopathy
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Swastha and Swasthya **2.** Healthy Life style -Dinacharya (Daily regimen) **3.** Ratricharya **4.** Ritucharya **5.** Roganutpadaniya **6.** Sadvritta **7.** Naturopathy / Yoga **8.** Ahara
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable**	**1.** Healthy Life style -Dinacharya (Daily regimen) **2.** Ritucharya **3.** Ahara **4.** Yoga

	to know	
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Janapadodhwamsa / Maraka Vyadhi **2.** Environmental health **3.** Disaster management **4.** Occupational Health **5.** School health services **6.** Disinfection **7.** Primary health care **8.** Mother and Child health care **9.** Family welfare programme **10.** Preventive Geriatrics **11.** World Health Organization and International health agencies **12.** Vital Statistics **13.** Health Administration **14.** National Health Policy **15.** National Health Programmes **16.** Janapadodhwamsa / Maraka Vyadhi **17.** Environmental health **18.** Occupational Health **19.** National Health Programmes **20.** Family welfare programme
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Janapadodhwamsa / Maraka Vyadhi **2.** Disaster management **3.** Environmental health **4.** School health services **5.** Occupational Health **6.** Mother and Child health care **7.** Family welfare programme **8.** Preventive Geriatrics
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable**	**1.** Janapadodhwamsa / Maraka Vyadhi **2.** Environmental health **3.** Primary health care **4.** National Health Programmes

	to know	

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Yoga - Demonstration of 4 Asanas and 1 Pranyama or Shatkarma proedure Any four asanas from following list for demonstration- Trikonasana, Ardhakatichakrasana, Gomukhasana, Bhadrasana, Pavanamuktasana, Sarvangasana, Bhujangasana and Shalabhasana. Each asana will carry 4 marks x 4 = 16 Procedure -1 mark, Final posture Holding time - 1, Breathing pattern-1 mark and On site viva - 1 mark Any one Pranayama among Nadishuddhi, Suryabhedana, Seetali, Seetkari , Bhramari or any one shatkarma among Neti and KapalabhatiEach pranayama or Shatkarma will carry 4 marks	20
2	Diet and Lifestyle advice case sheet A. Advise on Diet case - 25 Marks - Scenario will be given and asking student to prescribe diet as per the age, prakriti, occupation, agni bala etc,.. B. Advise on Lifestyle - 15 Marks - Scenario will be given and asking student advise lifestyle modifications such as Brahme muhurta uthishteth, Vyayama, Kavala- gandusha,Abhyanga, Udwartana ,Pratimarsha nasya etc,.. ,	40
3	Problem-based evaluation - Disinfection, Communicable diseases Environmental health, & Non- Communicable incuding deficiency diseases , A. Disinfection (identification, dose, suitsbility , dilution and contact period), Communicable diseases (giving scenarios and identifying diseases and mentioning preventive measures) and Environmental health (giving scenarios related environmental health issues and asking students to mention preventive and control measures) - 15 Marks B. Non- Communicable diseases (creating scenarios and asking to identify the diseases with preventive and control methods) and deficiency diseases (creating scenarios and asking students to indentify the deficiency conditions and asking the students to recommend the nutrients with nutrional profile etc,. - 15 Marks	30
4	Practical Records	10
5	Viva Viva on Project work (Activity based) - 10 Marks	60

Viva on I Paper - 25 Marks

A. Definition of Swastha , Swasthya, Swasthavritta and Health, dimentions of health, objective and subjective components of well-being- 2Mark

B. Benefits of Ushajala pana, Kavala , Gandusha, Dantadhavana, Anjana, Abhyanga,Udvartana, Vyayama, Snana and Tambula - 4 Mark

C. Rarti bhojana, Definition of Nidra , Types of nidra, Ahita nidra, definitions of sleep disorders , Definitions of Brahmacharya and Abrahmacharya and Adanakala and Visarga kala ritus, Doshavastha ,Balavastha,Agniavastha of different ritus , Definition of Ritusandhi, Yamadamshtra - 2 Marks

D. Adharaneeya vegas , Dharaneeya vega , definition of sadvritta and Acararasayana - 2 Marks

E. Importance of Ahara, classification of foods, Aharasevana kala, Ashta ahara vidhivisesha ayatana, Dwadasaha asana pravicarana with slokas , listing of nityasevana ahara dravya(Preferebly sloka), meaning of Pathya , Samashana, Adhyashana, Vishamasana. Sources and deficiency diseases of nutrients, Pastuerization of milk and its methods, meaning of different diet patterns, definition of nutrogenomics, nutracueticals, nutrigenetics and viridhha ahara . Definition, benefits and types of rasayana and definition of anti-oxidants with examples- 10 Marks

F. Definitions of Yoga , Meaning and types of Yama , Niyama, Asana,Pranayama, Pratyahara, Dharana, Dhyana,Samadhi (slokas mandatory), listing of shatkarma and indications of shatkarma (sloka mandatory), types of Bamdha, names of Shatchakra, diferences between Sushumna, Pingala and Ida nadi, definition of Moksha, Muktatma lakshana , Moksha upaya, , Basic principles of Naturopathy, Types of Fasting, Hydrotherapy and Massage - 5

Paper II - 25 Marks

	A. Meaning and causes of Janapadodhwamsa, Definitions of terms related to Epidemiolgy and infectious diseases, Dynamics of disease tranmission, Immunizing agents and Immunization schedule. Definition of vyadhikshamatva, Causative organisms and preventive measures of Communicable diseases -5 Marks B. Composition of Air, Definition of Comfort zone, Ventilation and its types, Definition of safe and wholesome water, Sources and types ofWater , Purification methods of water as per Ayurveda & Contemporary medicine, Definition of different types of waste, Definition of disaster and types of disasters- 5Marks C. Definition of occupational health, listing out occupational hazards and diseases. Est act & Factories act, Health problems of school children, definition of different terms related to disinfection, types and agents of disinfection - 5 Marks D. Definition, principles and elements of Primary health care, population coverage , functions and staff pattern at Sub-centre, Primary health centre and Community health centre, Objectives, problems and indicators of MCH, Definitions of demography, familiy planning ,eligible couple and target couple and methods of family palnning - 5Marks E . Definition of Geriatrics,Problems of aged, Definition,structure and regions of WHO, Year of eshtablishment , head quarters and main functions of international health agencies, Definition and sorces of vital statistics, organizational structure of health administartion , Year of eshtablishment and main objectives of different national health programmes- 5 Marks	
6	Elective (Set SC)	10
7	Interna Assessment -	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	Relevant portions of Charaka, Sushruta, Vagbhata, Sarngadhara, Bhavaprakasha, Yogaratnakara, Madhavanidana and Bhelasamhita.-relevantSamhithas	Print /online samhithas
2	SwasthavrittaSamucchaya	Vaidya . Rajeswaradutta shastri , Chaukhambha Viswabharathi, Varanasi, India
3	Swasthavrittavigyan	Dr.Ramaharsha singh , Chaukhambha Publishing house, Varanasi, India
4	Yoga sutras of Patanjali	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
5	Hathayogapradipika	Swami Muktibodananda , Published by Yoga publications trust, Ganga darshan, Munger, Bihar, India
6	Gheranda samhitha	Edited with Sweta , English commentary of Mrs.Shweta Bhat and Edited by Goswami Prahlad Giri, Published by Krishnadas Academy , Varanasi- 221001
7	Yoga deepika	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
8	Light on Yoga	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
9	Light on Pranayama -	BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
10	The Foundations of Contemporary Yoga	Professor RH Singh , Published by Chaukhambha Sanskrit Pratishtan, Newdelhi ..
11	Park's Text book of Preventive and Social Medicine	K.Park , Published by M/s BANARASIDAS BHANOT, LABALPUR, INDIA
12	Text book of Preventive and Social Medicine	MC Gupta & BK Mahajan, Published by JAYPEE BROTHERS , Medical publishers , Newdelhi
13	Dr. Reddy’s comprehensive guide to Swasthavritta	Dr.P.Sudhakar Reddy , Published by Chaukhambha Sanskrit Pratishtan, New Delhii
14	Indian food composition Tables	T Longvah , Published by National institute of Nutrition, Hyderabad
15	Food and nutrition	Swaminathan , Published by Banglore Printing & Publishing Co.Ltd, Banglore
16	Swasthavrittasudha	Vd.Kashinath Samagandi, Published byb Ayurveda Sanskrit hindi pustak bhandar , Jaipur .

17	S.Kashi's Text book of Svasthavrtttamritam	Vd.Kashinath Samagandi, Published by Ayurved sanskrit hindi pustak bhandar, Jaipur
18	Text Book of Swasthavrittam	Dr. Mangala Gouri V Rao, Chaukhambha Orientalia, Varanasi, India (2022)
19	Text book on Swasthavritta	Dr.P. Sudhakar Reddy , Dr.Beena MDPublishers : Chaukhambha Orientalia, Varanasi, India Year : 2022
20	Bhojanakutuhalam	Raghunatha suri,Edited by Scholars of the Centre for Theoretical foundations (CTF), Institute of Ayurveda and Integrative Medicine I-AIM, FRLHT , Bengaluru- 560064
21	Kshemakutuhalam	Compiled by Kshema sharma , Published By Indian institute of Ayurveda & Integrative medicine , Bengaluru-560064
22	Recent trends in Community Medicine	Suryakantha AH, Published by JAPEEPY BROTHERS
23	The Essentials of Natur cure	Dr.Mangala Gouri.V. Rao, Published by Chaukhambha Orientalia, Varanasi
24	WHO	https://www.who.int
25	Food laws	https://www.corpseed.com/knowledge-centre/food-laws-and-regulations-in-india
26	Food acts	: https://fssai.gov.in/cms/food-safety-and-standards-act-2006.php
27	National health programs	https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0&linkid=55&lid=138
28	Family welfare programme	https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0&linkid=55&lid
29	Health & Family welfare	https://www.india.gov.in/topics/health-family-welfare
30	Census of India	: https://censusindia.gov.in
31	Hatha yoga Pradeepika	Pandith. Hariprasad Tri[athi, Published by Chaukhambha Krishna das Academy, Varanasi , India
32	A Complete Handbook of Nature cure	H.K.BAKHRU , JAICO Publishing house, Bombay
33	Yoga & Ayurveda	Satyendra prasad MIshra , Published by Chaukhambha Sanskrit Samsthan , Varanasi
34	The Yoga Science	Dr. Ravi R Javalgekar , Published by Chaukhambha Sanskrit Sansthan , Varanasi, India
35	Concept of Ayurveda for perfect Health & Longevity	Vaidya H.S. Kasture , Published by Shree baidyanath Ayurveda Bhavan Private LTD, Nagpure , India

36	Essentials of Community medicine practicals	DK Mahabalaraju, Published by JAYPEE BROTHERS Medical publishers , Newdelhi
37	Positive health through Ayurveda	Dr.LP Gupta & Dr.LV Guru, Published by Chaukhambha sanskrit Pratishtana , Newdelhi
38	Food Science	B Srilakshmi , Published by NEW AGE INTERNATIONAL (P)LIMITED, PUBLISHERS , NEWDELHI
39	Apollo Clinical Nutrition- Handbook	Anita Jatan, Daphnee DK, Haritha Shyam, Priyanka Rohatgi and Kajal Pandya Yeptho- Published by JAYPEE BROTHERS MEDICAL PUBLISHERS PVT LTD, NEWDELHI

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Samhita Adhyayan-2

(SUBJECT CODE : AyUG-SA2)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

SA2

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SA2

Summary

Total number of Teaching hours: 240			
Lecture hours(LH)-Theory		100	100(LH)
Paper I	100		
Non Lecture hours(NLH)-Theory		140	140(NLH)
Paper I (40)	140		
Non Lecture hours(NLH)-Practical ##			
Paper I (100)			

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	-	75	(Set SB) 10	15
Sub-Total	100	100			
Total marks	200				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

Details in Practical list, Table 4 and Table 4a

PREFACE

In continuation with the curriclum reforms started previous year, **Samhita Adhyayan-2** focuses on learning Samhita with due significance to the methodology of textual structuring and interpretation. Charakasamhita is taken as a model text here considering its vast contributions to Ayurveda. Students who learn Ayurveda will benefit by Samhita Adhyayan to comprehend sense of importance of its traditional classical literature. SA2 tries to justify the methodology of structuring samhita and appraise the importance of tools of decoding samhita such as tantrayukti and vyakhyana. Relating and interpreting the various references, explaining and interpreting important sidhantas, applying sidhantas in clinical practice, making use of specific diagnostic and assessment guidelines mentioned in Carakasamhita, demonstrating principles of management of various clinical conditions etc. are some of the thrust areas addressed. Importance of by hearting important slokas also is highlighted. The content of SA2 belongs to 54 chapters of Carakasamhita viz. Sutrasthana (18 chapters 13-30, initial 12 chapters already dealt in SA1), Nidanasthana (8 chapters), Vimanasthana (8 chapters), Shareerasthana (8 chapters) and Indriyasthana (12 chapters). Each chapter is taken as a unit in the syllabus. A chapter starts with short introduction (**adhyaya parichaya**) through justifying the position of the chapter and introducing key terms in the chapter. This is followed by explaining important sidhantas (**sidhanta-vivarana**) in the chapter. At the end summary of the chapter (**adhyayasangraha**) is done with the help of summarizing slokas at the end of the chapter. This will help students to map the whole content of the chapter, even though some of them are not dealt in detail during sidhanta-vivarana. **Sloka sangraha** (compilation of sloka) compiles the most important slokas in the chapter. Application of **Tantrayukti** and **Vyakhyana** in proper understanding of Samhita also is envisaged as a separate section while planning practicals. Efforts have been taken to design some interesting and innovative activities and practical as a part of developing this syllabus. They have been added to resepective tables here. It does not restrict our teachers from designing and implementing more attractive and effective activities or customizing those ones which are enlisted, as and when needed, without loosing spirit of the new outlook.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3: Learning objectives (Theory) of Course 18
Paper 1 18
List of Practicals 72
Table 4: Learning objectives (Practical) 74
Practical 1 74
Table 4a: List of Practical 81
Activity 91
Table 5- Teaching learning method 95
Table 6: Assessment Summary: Assessment is subdivided in A to H points 96
6 A-Number of Papers and Marks Distribution 96
6 B - Scheme of Assessment (formative and Summative) 96
6 C - Calculation Method for Internal assessment Marks 98
6 D - Evaluation Methods for Periodical Assessment 98
6 E Question Paper Pattern 99
6 F Distribution of theory examination 100
Paper 1 100
6 G Blue print of paper I 104
6 H Distribution of Practical Exam 108
References Books/ Resources 109
Abbreviations 111

Course Code and Name of Course

Course code	Name of Course
AyUG-SA2	Samhita Adhyayan-2

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SA2 At the end of the course AyUG-SA2, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	**Justify the Methodology of structuring samhitas and appraise the importance of tools of decoding Charakasamhita (Tantrayukti and vyakhyana)**	PO1
CO2	**Relate and interpret various references of concepts in Charakasamhita**	PO1
CO3	**Explain and interpret biological factors and their measurements in the manifestation of diseases.**	PO1,PO3
CO4	**Explain and utilize various siddhantas in different dimensions of clinical practice.**	PO1,PO3,PO5
CO5	**Demonstrate the knowledge of dravya and adravya based therapeutics.**	PO1,PO3,PO5
CO6	**Apply diagnostic guidelines regarding diseases including arishta lakshana based on the principles mentioned in Charakasamhita**	PO1,PO3,PO7
CO7	**Explore the determinants of health in the background of Charakasamhita.**	PO1
CO8	**Develop ethical professional and moral codes and conducts as a physician.**	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**Cha.Su.13- Sneha Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sneha yoni 2. Chaturvidha sneha and its qualities 3. Sneha kaala and its anupana 4. Pravicharana sneha 5. Acchapeya 6. Sneha matra and its indications 7. Introduction to sneha yogya and ayogya purusha 8. Introduction to ayoga, samyak yoga and atiyoga of snehapana 9. Koshta pariksha 10. Introduction to snehapana vidhi 11. Introduction to sadyasneha 12. Sneha vyapat kaarana, lakshana and chikitsa **III. Adhyaya sangraha**	1	37	3	1
2	**Cha.Su.14- Sveda Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Benefits of swedana 2. Swedana bheda 3. Swedana vidhi 4. Samyak swinna lakshana 5. Atiswinna lakshana and chikitsa 6. Swedana yogya and ayogya 7. Trayodasha agni sweda vivarana 8. Dasha vidha niragni sweda **III. Adhyaya sangraha**	1		2	1
3	**Cha.Su.15- Upakalpaneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Samshodhana upayogi dravya sangraha 2. Aturalaya nirmana 3. Introduction to vamana vidhi 4. Samsarjana krama 5. Introduction to virechana vidhi 6. Benefits of samshodhana **III. Adhyaya sangraha**	1		2	3
4	**Cha.Su.16- Chikitsaprabhritiya Adhyaya** **I. Adhyaya parichaya**	1		2	2

	II. Siddhanta vivarana 1. Samyak virikta – avirikta - ativirikta lakshana 2. Bahudosha lakshana 3. Benefits of samshodhan 4. Importance of samshodhan 5. Samshodhana atiyoga and ayoga chikitsa 6. Swabhavoparama vada 7. Chikitsa paribhasha 8. Qualities of chikitsa-prabhrita vaidya **III. Adhyaya sangraha**				
5	**Cha.Su.17- Kiyantashiraseeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance of shiras 2. Introduction to shiroroga, hridroga, vidradhi, madhumeha and madhumeha pidaka 3. 62 types of permutation and combination of doshas 4. Trayodasa sannipata (13 types of combination of doshas) 5. 12 types of vishama sannipata (Doshavikalpa) 6. Types of kshaya 7. Ojus 8. Doshagati **III. Adhyaya sangrah**	1		3	0
6	**Cha.Su.18-Trisotheeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Types of shotha 2. Trividha bodhya (three types of assessment of diseases) 3. Ekadeshaja shotha 4. Aparisankhyeyatwa of roga 5. Anukta roga (unnamed diseases) and its management 6. Karmas of prakrita doshas **III. Adhyaya sangraha**	1		1	3
7	**Cha.Su.19-Ashtodareeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhya samprapti of samanyaja vyadhi 2. Tridosha pradhanyata 3. Nija-agantu sambandha **III. Adhyaya sangraha**	1		1	3
8	**Cha.Su.20- Maharoga adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Vyadhibheda (classification of disease) 2. Agantu-mukha (causes of agantu diseases) 3. Trividha-prerana (three etiological factors) 4. Samanyaja-nanatmaja-vikara – classification	1		2	2

	5. Vataja-nanatmaja vikaras, atmarupa and prakupitakarma 6. Pittaja- nanatmaja vikaras, atmarupa and prakupitakarma 7. Kaphaja- nanatmaja vikaras, atmarupa and prakupitakarma **III. Adhyaya sangraha**				
9	**Cha.Su.21- Ashtauninditeeya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Ashta nindita purusha 2. Ati sthula and ati karshya 3. Ashta dosha of sthaulya 4. Dosha-lakshana-hetu of karsya and sthaulya 5. Prasasta purusha lakshana 6. Chikitsa sutra of sthaulya and karsya 7. Nidra paribhasha 8. Arha and varjya for divaswapna 9. Effects of ratri jagarana and divaswapna 10. Types of Nidra **III. Adhyaya sangraha**	1		3	3
10	**Cha.Su.22- Langhanabrimhaneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Shadupakrama 2. Swaroopa and lakshana of shadupakrama 3. Dasavidhalanghana 4. Dasavidhalanghana-prayoga-niyama 5. Properties of dravyas used in shadupakrama 6. Samyaklakshana of langhana, brimhana and sthambhana 7. Atiyoga and ayoga of shadupakrama **III. Adhyaya sangraha**	1		3	2
11	**Cha.Su.23- Santarpaneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Santarpana dravya 2. Santarpanajanya vyadhi 3. Chikitsasutra of santarpanajanya vyadhi 4. Apatarpanajanya vyadhi 5. Chikitsasutra of apatarpanajanya vyadhi **III. Adhyaya sangraha**	1		2	0
12	**Cha.Su.24- Vidhishoniteeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Shonita-pradhanyata 2. Shonita-dushti-karana 3. Shonitajanya roga 4. Shonita-dushti-chikitsa 5. Raktadushtilakshana in relation to dosha	1		3	2

	6. Vishuddharaktalakshana 7. Vishuddharakta-purusha-lakshana 8. Pathya in raktamoksha 9. Introduction to mada-murchaya-sanyasa **III. Adhyaya sangraha**				
13	**Cha.Su.25- Yajjapurusheeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Factors responsible for generation of purusha and diseases 2. Concept of hita ahara and its importance 3. Different factors related with ahara like aharayoni, prabhava, udarka, upayoga, rasa, gurvadi guna etc 4. Agryasangraha- (Aushadha- Anna-Vihara) 5. Terminology of pathya and apathya 6. Enumeration of aasavayoni **III. Adhyaya sangraha**	1		2	4
14	**Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sambhasha parishat on number of rasa 2. Gunas of parthivadi dravyas 3. Dravya prabhava and guna prabhava 4. Dravya karmukata siddhanta (pharmacodyanamics) with respect to adhikarana, kala, karma, veerya, upaya and phala 5. Paradi guna 6. Rasadi-panchaka – Additional knowledge 7. Examples of samanapratyarabdha and vichitra pratyaarabdha dravyas 8. Properties of vipaka 9. Perception of rasa, vipaka and veerya 10. Examples of prabhava 11. Types of viruddha and management of complications 12. Principles of treatment of diseases caused by viruddha ahara **III. Adhyaya sangraha**	1		3	3
15	**Cha.Su.27- Annapaana vidhi Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Benefits of hita ahara 2. Examples of hita ahara and ahita ahaara 3. Ahara vargas 4. Importance of anna **III. Adhyaya sangraha**	1		4	2
16	**Cha.Su.28- Vividhashitapeeteeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana**	1		4	14

	1. Caturvidha-ahara 2. Difference between hita aahara and ahita aahara 3. Susceptibility to diseases (with respect to pathya and apathya) 4. Vyadhi-saha shareera 5. Dhatupradoshaj, upadhatupradoshaj, indriyapradoshaja, malapradoshaja vikaras and treatment principles 6. Shakhagati and koshtagati of doshas 7. Causes of health and diseases 8. Importance of prajnaaparadha **III. Adhyaya sangraha**				
17	**Cha.Su.29- Dashapraanaayataneeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Enumeration of dasha pranaayatana 2. Terminology of praanaabhisara vaidya and rogaabhisara vaidya, chadmachara, yogya bhishak and karmakovida **III. Adhyaya sangraha**	2		2	2
18	**Cha.Su.30- Arthedashamahamooleeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance of hridaya 2. Best factors for life (shreshtatama bhava) 3. Four types of Ayu 4. Shashwatatwa of Ayurveda 5. Quality of Learner of Ayurveda 6. Ashtaprashna 7. Dashaprakaran 8. Synonyms of tantra **III. Adhyaya sangraha**	2		2	0
19	**Cha.Ni.01-Jwara nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Description of nidanapanchaka 2. Nidanaparyaya 3. Vyadhiparyaya 4. Ashtavidha jwaranidana , samprapti and lakshana. 5. Jwarapurvarupa 6. Jwara mahaprabhava vivarana 7. Jwara samkshipta chikitsa sutra. 8. Importance of ghrutapaan in jeerna jwara. **III. Adhyaya sangraha**	2	19	2	2
20	**Cha.Ni.02-Raktapitta nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Raktapitta paryaya and nirukti. 2. Raktapitta nidan, purvarupa, upadrava	2		2	2

	3. Raktapitta marga, dosha anubhandha and sadhyaasdhyata. 4. Raktapitta chikitsa sutra **III. Adhyaya sangraha**				
21	**Cha.Ni.03-Gulma nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhya samprapti 2. Gulma sthanas 3. Nidana, lakshana and samprapti of vata-pitta-kahpaja gulma 4. Shonita gulma 5. Gulma purvarupa 6. Sadhya asadhya 7. Chikitsa sutra **III. Adhyaya sangraha**	2		2	2
22	**Cha.Ni.04-Prameha nidana adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhyasamprapti (vimsatiprameha) 2. Sampraptighataka (doshavisesha and dushyavisesha) 3. Nidanapanchaka of doshaja prameha (vata, pitta and kapha) 4. Sadhyasadhyata 5. Poorvarupa 6. Upadrava 7. Chikitsasutra **III. Adhyaya sangraha**	2		2	3
23	**Cha.Ni.05-Kushta nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Saptadravya of kushta 2. Aneka rupa of kushta 3. Samanya nidana and samanya purvarupa 4. Sadhyasadhyata 5. Sapta kushta lakshana 6. Upadrava **III. Adhyaya sangraha**	2		2	4
24	**Cha.Ni.06-Shosha nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Visesha nidana, samprapti and lakshana of shosha 2. Purvarupa 3. Ekadasa rupa 4. Sadhyasadhyata **III. Adhyaya sangraha**	2		2	2

25	**Cha.Ni.07-Unmada nidana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sankhya samprapti 2. Unmadaabhimukha karana (predisposing factors of unmada) 3. Unmada nirvacana (ashta vibhrama) 4. Purvarupa 5. Vata-pitta-kapha-sannipataj unmada lakshna 6. Role of prajnaparadha 7. Chikitsasutra of unmada 8. Agantuja unmada- nidana, purvarupa, lakshana, chikitsa sutra **III. Adhyaya sangraha**	2		2	4
26	**Cha.Ni.08-Apasmara nidana adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Definition of apasmara 2. Apasmaraabhimukakarana (predisposing factors of unmada) 3. Vishesha lakshana of apasmara 4. Cikitsasutra 5. Nidanarthakara roga 6. Vyadhisankara 7. Suddha-asuddha cikitsa 8. Sadhyasadhyata – nirvacana 9. Tiryaggatadosha - cikitsasutra **III. Adhyaya sangraha**	2		2	4
27	**Cha.Vi.01- Rasa vimana Adhyayam** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance and objective of vimanasthana 2. Prakrutisamasamaveta and vikrutivishamasamaveta siddhanta 3. Chaturvidha Prabhava (rasa-dravya-dosh-vikara prabhava) 4. Examples of dravyaprabhava- taila, ghruta and madhu. 5. Dravyas which are avoided for regular consumption 6. Satmyaparibhasha and types 7. Aharavidhi visheshayatana 8. Ahara vidhi vidhana and bhojyasaadgunyam **III. Adhyaya sangraha**	3	24	2	3
28	**Cha.Vi.02-Trividha kuksheeya Adhyayam** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Three divisions of amashaya for deciding aharamatraa 2. Matraavat ahaara lakshan	3		2	0

	3. Amatravatva of ahara 4. Effects of heenamaatra and atimatra of ahara 5. Mental factors which affect the digestion of food 6. Two types of amadosha 7. Hetu-linga and aushasdha of amadosha 8. Demarcation of amasaya **III. Adhyaya sangraha**				
29	**Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Importance of timely collection of medicines. 2. Janapadodhwamsakara samanya bhavas (four causes of epidemic diseases) 3. Lakshanas of vikrut vayu, jala, desha and kala. 4. Chikitsa siddhanta of janapadodhwamsakara vikaras 5. Role of adharma in janapadodwamsa 6. Niyata and aniyata ayu 7. Daiva and purushakara 8. Examples of hetuviparita chikitsa in jwara 9. Apatarpana and its types 10. Description of desha **III. Adhyaya sangraha**	3		2	2
30	**Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Three methods of diagnosing diseases 2. Characteristics of aptopadesh, pratyaksha and anumana 3. Application of aptopadesha, pratyaksha and anumana in clinical examination **III. Adhyaya sangraha**	3		2	3
31	**Cha.Vi. 05- Sroto vimana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Srotas paribhasha 2. Types of srotas 3. Types of srotodushti 4. Hetu, lakshan and chikitsa of strotodushti **III. Adhyaya sangraha**	3		2	2
32	**Cha.Vi. 06-Roganika vimana adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Dvividha vyadhi bhedha based on prabhava, bala, adhishthana, nimitta, ashaya bheda. 2. Vyadhi aparisamkheyatva 3. Relation between shareerika and manasika dosha. 4. Anubhandhy-anubandha roga 5. Agni bheda, prakruti bheda.	3		2	2

	6. Vatala prakrutigata roga, their hetu and chikitsa, pitta prakrutigata roga, their hetu and chikitsa-kapha-prakrutigata roga, their hetu and chikitsa 7. Raja vaidya gunas **III. Adhyaya sangraha**				
33	**Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Dvividha vydhita purusha based on severity of disease and clinical presentation 2. Krimi bheda 3. Trividha chikitsa **III. Adhyaya sangraha**	3		2	2
34	**Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam.** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Shastra pareeksha 2. Means of learning shastra 3. Adhyayana and adhyapana vidhi 4. Sambhasaha vidhi- Types 5. Three types of parishat 6. Vadamarga padani 7. Methodology of Vada and its benefits 8. Dashavidha pareeksya bhava 9. Dashavidha atura pareeksha **III. Adhyaya sangraha**	3		5	11
35	**Cha.Sha.01-Katithapurusheeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sareera and sareerasthana 2. Purusha and its types 3. Manonirupanam 4. Atmalinga 5. Ashtaprakriti and shodasavikara 6. Srishtyutpatti and pralaya 7. Trividha dukhahetu 8. Prajnaparadha 9. Daiva 10. Naishtikichikitsa 11. Vedana and vedana adhishtana 12. Vedananasahetu 13. Moksha 14. Smriti hetus **III. Adhyaya sangraha**	2	13	2	3
36	**Cha.Sha.02-Atulyagothreeyam Adhyaaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana**	2		1	0

	1. Prerequisites of conception 2. Shodashadhatu in shareera 3. Sexual abnormalities 4. Sadyogriheeta garbhinee lakshana 5. Ativahikapurusha 6. Daiva & paurusha 7. Roganutpatti **III. Adhyaya sangraha**				
37	**Cha.Sha.03-Khuddika garbhavakranti Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Matrujadi bhavas in garbha 2. Beeja & beejabhaga **III. Adhyaya sangraha**	2		1	0
38	**Cha.Sha.04-Mahatee garbhavakranti Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Garbha & garbhaposhana 2. Garbhopaghatakara bhava 3. Congenital abnormalities 4. Trividhasatva bheda (manasaprakriti) **III. Adhyaya sangraha**	2		1	2
39	**Cha.Sha.05-Purushavichaya Shareera Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Lokapurushasamya 2. Hetwadi panchaka 3. Satya buddhi **III. Adhyaya sangraha**	2		1	4
40	**Cha.Sha.06-Sareeravichaya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Definition of sareera 2. Samanyavisesha sidhanta – applied aspect 3. Shareera dhatuguna 4. Shareeravriddhikarabhava 5. Balavriddhikarabhava 6. Aharaparinamakarabhava 7. Sareeraguna bheda 8. Kala-akala mrityu 9. Param ayu karanam **III. Adhyaya sangraha**	2		1	2
41	**Cha.Sha.07- Sareerasankhya sareera Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Paramanu bheda of shareera	2		1	2

	III. Adhyaya sangraha				
42	**Cha.Sha.08-Jathisutreeya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sutikagara 2. Garbhopaghatakara bhava **III. Adhyaya sangraha**	2		1	12
43	**Cha.In.1-Varnasvariyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Factors for assessing rishta 2. Six types of prakruti bhedha 3. Rishtaadhikara kruta vikruti bhedha 4. Prakruta and vaikarika varna 5. Varnavishayak arishta 6. Prakruta and vaikarika swara 7. Swara vishayak arishta **III. Adhyaya sangraha**	3	7	1	1
44	**Cha.In.2-Pushpitakam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Gandha vishayaka samgrah 2. Rasa vishayaka arishta **III. Adhyaya sangraha**	3		1	0
45	**Cha.In.3-Parimarshaneeyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sparshagamya bhava (palpable signs) 2. Sparshavishayak arishta lakshana **III. Adhyaya sangraha**	3		1	0
46	**Cha.In.4-Indriyaneekam Indriya adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Indriya vishayaka arishta samanya niyama (general rule regarding involvement of indriya) **III. Adhyaya sangraha**	3		1	0
47	**Cha.In.5-Purvarupeeyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Jvara rupa vishayaka poorvaroopiya rishta (rishta based on purvarupa of jvara) 2. Swapna bheda (types of swapna) **III. Adhyaya sangraha**	3		1	2
48	**Cha.In.6-Katamanisharireeyam Indriyam Adhyaya** **I. Adhyaya parichaya**	3		1	0

	II. Sidhanta vivarana 1. Rishta related to pureesha, mutra and swayathu **III. Adhyaya sangraha**				
49	**Cha.In.7-Pannarupiyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Pratichaya vishayaka arishta 2. Chaya vikruti arishtas 3. Five types chaya bheda 4. Seven types prabha bheda **III. Adhyaya sangraha**	3		1	0
50	**Cha.In.8-Avakshiraseeyam Indriyam Adhyaya** **I. Adhyaya parichaya** **II. Adhyaya sangraha**	3		1	0
51	**Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya** **I. Adhyaya parichaya** **II. Sidhanta vivarana** 1. Ashtamaharogas **III. Adhyaya sangraha**	3		1	0
52	**Cha.In.10-Sadyomaraneeyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Sadyo maraneeya arishtas **III. Adhyaya sangraha**	3		1	0
53	**Cha.In.11-Anujyotiyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Definition of Arishta **III. Shloka sangraha**	3		1	0
54	**Cha.In.12-Gomayachurniyam Indriya Adhyaya** **I. Adhyaya parichaya** **II. Siddhanta vivarana** 1. Mumurshu lakshana, 2. Prashasta doota lakshana and mangalika dravya. 3. Arogya janaka bhava **III. Adhyaya sangraha**	3		1	17
Total Marks			**100**	**100 hr**	**140 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Cha.Su.13- Sneha Adhyaya (Lecture :3 hours, Non lecture: 1 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as sneha, snehayoni, caturvidhasneha, acchasnehapaana, sadyasneha and pravicharana.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist sthavara and jangam snehayoni Ch Su 13/9-11	CK	MK	K	L&GD,ML	M-POS,TT-Theory	F&S	I	
CO4,CO5	Justify why tila taila is the best among taila varga. Ch Su 13/12	CK	MK	KH	L,L&PPT,DA	T-EMI	F&S	I	
CO4,CO5	Explain qualities and mode of action of eranda taila Ch. Su 13/12	CK	DK	KH	L,L_VC,DA	T-EMI	F&S	I	
CO4,CO5	Enlist four types of sneha and justify sarpi as the best (shreshta).	CC	MK	KH	L,DIS	PRN,TT-Theo	F&S	I	

	Ch .Su 13/13				,DA	ry,VV-Viva			
CO4,CO5	Explain snehapaan kaala and anupaan Ch .Su 18-22	CK	MK	K	L&G D	TT-Theory,V V-Viva	F&S	I	
CO4,CO5	Define and enlist 24 types of pravicharana sneha and other types of sneha pravicharana. Ch Su 13/23, 24, 25, 27, 28	CC	MK	KH	L&G D	CL-PR,TT-Th eory,VV-Viva	F&S	I	
CO4,CO5	Explain acchasnehapaana and its importance Ch Su 13/26	CK	DK	KH	L&G D,RP, PL	TT-Theory,V V-Viva	F&S	I	
CO4,CO5	Enlist types of snehamatra Ch.Su 13/29-30	CC	MK	KH	L&G D,RE C	QZ ,TT-Theor y,VV-Viva	F&S	I	
CO4,CO5	Mention rule for duration of snehapaana Ch. Su 13/51	CC	MK	KH	L&G D,BS	PUZ,TT-Theo ry,VV-Viva	F&S	I	
CO4,CO5	Mention yogya and ayogya for snehana Ca Su 13/52-56.	CC	DK	KH	L,L& PPT,L &GD, CBL	TT-Theory,V V-Viva	F&S	I	V-PC
CO4,CO5	Summarize samyak snigdha lakshana, asnigdha lakshana and atisnigdha lakshana. Ch Su 13/57-59	CC	DK	KH	L&G D,D	P-ID,TT-Theo ry,VV-Viva	F&S	I	
CO2,CO4,CO 5	Summarise snehavyapat karana, lakshana and chikitsa Ch Su 75-79	CAP	NK	KH	L&G D,PL	TT-Theory,V V-Viva	F&S	I	
CO4,CO5	Figure out importance of pathya and apathya in snehapaan.Ch Su 13/60-61-64	CK	DK	KH	L&G D,SD L	M-CHT,TT-T heory,VV-Viva	F&S	I	
CO4,CO5	Explain pathyaapathya to be followed during and after	CC	MK	KH	L&G	CHK,TT-Theo	F&S	I	

	snehapaana. Ch Su 62-64				D,EDU	ry,VV-Viva			
CO4,CO5	Explain criteria's for assessing koshta. Ch Su 13/ 65-69.	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5,CO6	Illustrate types of koshtha in patients undergoing snehapana	PSY-SET	NK	SH	CBL,CD,D_BED	P-ID,VV-Viva	F&S	I	
CO4,CO5	Mention some examples for recipes of vicharanasneha.Ch Su 13/82-94	CK	DK	K	L,L&PPT	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Interpret the role of agni in sadyasneha Ca Su 13/96-97	CK	DK	K	L,L&GD,IBL	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutra no. Ch Su 13/13-17, 22, 57-59.	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per Ch Su 13/100.	CK	NK	K	SDL	P-VIVA	F&S	I	
CO4,CO5	Relate dravya classification mentioned in Ch Su 1 (trividha) with snehayoni	CAP	MK	KH	DIS	PRN	F	I	
Topic 2 Cha.Su.14- Sveda Adhyaya (Lecture :2 hours, Non lecture: 1 hours)									
CO1,CO2	Justify the position of the chapter in the samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as agnisweda, niragnisweda, snigdhapurva, ruskhapurva and trayodasasweda	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain the benefits of swedana. Ch Su 14/ 3-5	CC	MK	KH	L&G	TT-Theory,V	F&S	I	

					D,RLE	V-Viva			
CO4,CO5	Explain samyak swedana and ati swedana lakshana Ch Su 14/13-15	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarize the indications and contraindications for swedana Ch Su 14/ 16-24.	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Differentiate pinda sweda, nadi sweda, avagah sweda and upanaha sweda with respect to the drugs used and procedure. Ch Su 14/25-37.	CC	DK	KH	L&GD,L_VC,CBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist 13 types of agni sweda. Ch Su 14/39-63	CC	MK	KH	L&PPT,L_VC	QZ ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist 10 types of niragnisweda Ch. Su 14/64.	CC	MK	KH	L,L&GD	O-QZ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist three classifications of dvividha sweda. Ch Su 14/66	CK	MK	KH	L&GD	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 14/4,5,39,40,64.	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 14/68-71	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 3 Cha.Su.15- Upakalpaneeya Adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO1,CO2	Explain basic meaning and importance of key terms in the chapter such as sambharan, aturaalaya, samsarjan krama.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarize the guidelines for Vaidyas before commencing chikitsa Ch Su 15/3-5.	CK	DK	KH	L&GD	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist samshodhana upayogi dravya sangraha Ch Su 15/6	CK	MK	KH	L&GD	QZ ,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Figure out the procedure of vamana karma. Ch Su 15/9-15	CC	DK	KH	L&GD,RP	CHK,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain samsarjana krama Ch Su 15/16	CC	MK	KH	L,L&GD	CL-PR,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Identify merits of samsarjanakrama in patients	PSY-SET	NK	SH	BS,IBL,D_BED	P-CASE,SP	F&S	I	
CO4,CO5	Outline procedure for virechana karma Ch Su 15/17-18	CC	DK	KH	L&GD,RP	CHK,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain benefits of samshodhana. Ch Su 15/22.	CC	MK	KH	L,L&GD	TT-Theory,VV-Viva	F&S	I	
CO5,CO7	Relate the structure of aturalaya (hospital) with the present scenario	CAP	DK	KH	DIS,BS,PrBL	DEB,M-MOD,INT	F	I	
CO1	Recite sutra Ch Su 15/22	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra Ch Su 15/2-25	CK	NK	K	SDL	P-VIVA	F&S	I	

Topic 4 Cha.Su.16- Chikitsaprabhritiya Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance.	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as bahudosha lakshana, swabhaavoparamvaada, chikitsaprabhirta.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Summarize samyak virikta –avirikta – ativirikta lakshana. Ch Su 16/6-10	CC	DK	KH	L&GD,D	RS,TT-Theory ,VV-Viva	F&S	I	
CO4,CO5	Explain bahudosha lakshana Ch Su 16/13-16	CC	MK	KH	L&GD	PUZ,TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Identify bahudoshalakahana in patients	PSY-SET	DK	SH	CBL,D_BED	P-VIVA	F&S	I	
CO4,CO5	Explain benefits and importance of samshodhana. Ch .Su 16/16-21	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain swabhavoparama vada Ch Su 16/ 27-32	CC	MK	KH	L&GD,BS	DEB,TT-Theory,VV-Viva	F&S	I	
CO2,CO5	Outline chikitsa of ayoga, atiyoga of samsodhana	CAP	DK	KH	L_VC,CBL,D	SP,TT-Theory ,VV-Viva	F&S	I	
CO4,CO5	Define chikitsa Ch Su 16/34-36	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO8	Appreciate benefits of chikitsa prabhruta bhishak. Ch Su. 16/37-38	CK	DK	KH	L&GD,D	TT-Theory,VV-Viva	F&S	I	
CO1	Recite sutras Ch Su 16/13-21,27,28,34-36	CK	MK	K	SDL,	P-REC	F&S	I	

					REC				
CO4,CO6,CO 7	Relate swabhavoparama with concept of nidana parivarjana	CAP	MK	KH	DIS	PRN	F	I	
CO1	Summarize the chapter as per sutra Ch Su 16/39-41	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 5 Cha.Su.17- Kiyantashiraseeya Adhyaya (Lecture :3 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&G D	INT,TT-Theor y,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as doshagati, doshavikalpa, trayodasasannipata	CK	MK	K	L&G D,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Explain importance of shiras. Ch Su 17/12	CK	MK	K	L&G D	TT-Theory,V V-Viva	F&S	I	
CO3,CO4	Enlist types of siroroga, hridroga and vidradhi	CC	MK	KH	L&G D	SP,TT-Theory	F&S	I	
CO3,CO4	Figure out 62 types of permutation and combination of doshas Ch Su 17/41-44	CK	DK	K	L&G D,GB L	PUZ,TT-Theo ry,VV-Viva	F&S	I	
CO3,CO4	Figure out 12 types of vishama sannipata Ch Su 17/45-61	CK	DK	K	L&G D	M-POS	F&S	I	
CO3,CO4,CO 6	Complement knowledge about kshayalaskhana of dosha-dhatu-mala to the existing understanding (additional important features mentioned in CS)	CK	DK	KH	DIS,F C	TT-Theory,V V-Viva	F&S	I	
CO3,CO4	Interpret dosha-vikalpa (combinations of doshas) in different conditions. Ch.Su. 17/45-61	CAP	MK	KH	IBL,C BL	P-PS,TT-Theo ry,VV-Viva	F&S	I	

CO3,CO7	Complement knowledge of Ojus to the existing understanding (additional important features mentioned in CS) Ch Su 17/73-77	CC	MK	K	DIS,FC	TT-Theory	F&S	I	H-RN
CO3,CO4,CO6	Outline the samprapti of madhumeha and importance of ojus. Ch Su 17/78-81	CAP	MK	KH	L&GD	TT-Theory	F&S	I	
CO2,CO3,CO4,CO7	Define the term “gati” and Classify and explain various kinds of gati. Ch.Su 17/112 - 118 Cakrapani	CK	MK	K	L&GD,RP	TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO6	Interpret asaya apakarsha-gati in relationship with dosha-gati. Ch.Su. 17/45-46	CC	DK	KH	L&GD	TT-Theory	F&S	I	
CO3,CO4,CO7	Explain kshayahetu Ch.Su. 17/ 76-77	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO6	Illustrate dosha-gati in clinical conditions	CAP	MK	KH	CBL,D	P-RP,P-CASE	F&S	I	
CO3,CO4	Explain identification of dosha vriddhi, kshaya, samya Ch.Su. 17/ 62	CC	MK	KH	L	CL-PR,TT-Theory,VV-Viva	F&S	I	
CO1	Recite sutras Ch Su 17/12, 41-44, 62, 112-118	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra Ch Su 17/120-121	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 6 Cha.Su.18-Trisotheeya Adhyaya (Lecture :1 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as trisotha, trividhabodhya sangraha and anukta roga	CC	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO5	Name and explain trividha-bodhya-sangraha (three-fold method	CC	MK	K	L&G	TT-Theory,V	F&S	I	

	for understanding disease – vikara prakriti, samuthana and adhisthana) Ca.Su. 18/55, 46-47				D	V-Viva			
CO3,CO6	Illustrate use of trividha-bodhya-sangraha in anuktavyadhi Ch Su 18/44-45	CAP	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO3,CO5	Outline pradesika sotha (local edema) Ch Su 18/19-36	CC	DK	K	L&GD,L_VC	P-ID,TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Explain aparisankhyeyatwa of diseases (innumerability) Ch Su 18/42	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3	Complement tridosha-samanyakarma with additional details mentioned in CS	CC	MK	K	BS,IBL,FC	PRN,TT-Theory,VV-Viva	F&S	I	
CO1	Recite sutras Ch Su 42,43,44-47	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter as per sutra Ch Su 18/54-56	CK	NK	K	SDL	P-VIVA	F&S	I	
Topic 7 Cha.Su.19-Ashtodareeya Adhyaya (Lecture :1 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms in the chapter such as nijavyadhi (intrinsic diseases), samanyaja-vyadhi (general diseases) and sankhyasamprapti (enumeration of types of diseases)	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Outline the types of diseases (sankhyasamprapti) mentioned in the chapter	CK	DK	K	L&GD,GBL	QZ ,PUZ,TT-Theory,VV-Viva	F&S	I	

CO3,CO4	Illustrate the importance of tridosha in occurrence of diseases Ch Su 19/5	CC	MK	KH	DIS,SDL	TT-Theory,VV-Viva	F&S	I	
CO3,CO4	Explain the relationship between Nija and Agatu rogas (intrinsic and extrinsic diseases) Ch Su 19/6,7	CK	MK	K	L&GD,PL	TT-Theory,VV-Viva	F&S	I	
CO6,CO8	Classify diseases in Ayurveda using available online resources (Activity, ref: activity table)	CAP	DK	KH	DIS,BL	SA,TT-Theory,VV-Viva	F	I	
CO1,CO2	Recite sutras Ch Su 19/5, 6	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 19/8,9	CK	NK	K	SDL	P-VIVA	F&S	I	
CO3,CO6,CO7	Summarize different classifications of diseases mentioned in deerghanjeeviteeya, tisraishaneeya, ashtodareeya, maharoga and roganeeka	CC	MK	KH	DIS,W	P-POS	F	I	
Topic 8 Cha.Su.20- Maharoga adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as agantumukha, trividhaprerana, samanyaja-vikara, nanatmaja-vikara and atmarupa	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO3,CO5	Explain the basis for the classification of diseases. Ch.Su. 20/3	CK	MK	K	L&GD,ML	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO5	Define nija and agantuja vyadhi. Ch.Su. 20/7	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO5	Describe kaarana for nija and agantuja vyadhi. Ch.Su. 20/4-5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	

CO3,CO5	Enlist nanatmajavyadhi of vata and relate guna, atmarupa, vikritakarma of vata and its upakrama. Ch.Su. 20/12,13	CAP	MK	K	L&GD	M-CHT,VV-Viva	F&S	I	
CO3,CO5	Enlist nanatmajavyadhi of pitta and relate guna, atmarupa, vikritakarma of pitta, and its upakrama Ch.Su. 20/14-16	CAP	MK	K	L&GD	M-CHT,VV-Viva	F&S	I	
CO3,CO5	Enlist nanatmajavyadhi of Kapha and Relate guna, atmarupa, vikritakarma of Kapha and its Upakrama. Ch.Su. 20/17-19	CAP	MK	K	L&GD	M-CHT,VV-Viva	F&S	I	
CO4,CO6,CO8	Make monographs of nanatamaja-vikaras (Activity, see activity list)	CAP	DK	KH	TPW,BL	M-CHT,CR-W	F	I	
CO3,CO6,CO7	Relate paribhasha of different terms in nanatamajavyadhi with descriptions available in Ashatanga sangraha Su 20/18	CC	DK	KH	DIS	T-OBT	F	I	
CO1,CO2	Recite sutras Ch. Su. 20/ 3, 4, 5, 11,14, 17, 20-22	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 20/ 23-25	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 9 Cha.Su.21- Ashtauninditeeya adhyaya (Lecture :3 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as ashtaninditapurusha, ashtadosha of atisthaulya, prasastapuruhsalakshana	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2	Enlist ashtaninditapurusha Ch Su 21/3	CK	MK	K	L&GD,RP	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist ashtadosha of atisthoola purusha and justify its ashtadosha Ch.Su. 21/4	CAP	MK	K	L&GD,RP	P-SUR,CL-PR,VV-Viva	F&S	I	
CO4,CO5,CO	Outline the diagnostic features of atisthula. Ch.Su.21/9	CC	MK	K	L&G	TT-Theory,V	F&S	I	

7					D	V-Viva			
CO5,CO6,CO7	Outline hetu and samprapti of atisthaulya Ch.Su. 21/4-8	CAP	DK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Describe chikistasutra for atisthula purusha and mention different formulations. Ch.Su. 21/20- 28	CAP	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO5,CO6	Describe hetu, dosha and lakshana for atikrusha purusha. Ch.Su. 21/11-15	CC	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Describe chikistasutra for atikrusha purusha and mention different formulations Ch.Su. 21/20, 29-34	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO6	Interpret why atisthula purusha is difficult to treat compared to krushapurusha Ch.Su. 21/16-17	CAP	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO5	Enlist the features of ideal physique in individuals (prashasta purusha lakshana) Ch.Su. 21/18-19	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO7	Define nidra and enlist its types Ch Su 21/35&58	CK	MK	K	L&PPT	TT-Theory,VV-Viva	F&S	I	
CO3,CO7	Determine significance of nidra as an etiological factor of sthaulya and karsya and its role in management of the same Ca.Su. 21/51	CAP	MK	KH	DIS,CBL,FC	CL-PR	F&S	I	
CO1,CO2	Recite sutras Ch Su 21/ 3,4,16, 18, 19, 35, 50, 58	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 21/60-62	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 10 Cha.Su.22- Langhanabrimhaneeya Adhyaya (Lecture :3 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms such as shadupakrama and dasavidhalanghana	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO5	Enlist and define shadupakrama. Ch.Su. 22/4, 9-12	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO2,CO5,CO7	Explain properties of dravyas used in shadupakrama with examples. Ch.Su. 22/12-17	CK	MK	K	L&PPT,PBL	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Enlist dasavidha-langhana and their indications Ch.Su. 22/19-23	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO2,CO4,CO5	Relate gurvadi guna and samanya visesha sidhanta with shadupakrama Ch Su 22/12-17	CK	DK	KH	DIS,FC	T-EMI,VV-Viva	F&S	I	
CO4,CO5	Identify dasavidhalanghana in treatment guidelines mentioned for different diseases	CAP	NK	KH	IBL,CBL	T-OBT,VV-Viva	F&S	I	
CO4,CO5	Explain samyaklakshana of langhana, brimhana and sthambhana Ch Su 22/34,35,38,40	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Outline atiyoga and ayogalakshana of brimhana, langhana and sthambhana Ch Su 22/36-38	CK	DK	K	L&GD,CBL	M-CHT,TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 21/9-24	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO1,CO2	Summarize chapter as per sutra Ch Su 22/44	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 11 Cha.Su.23- Santarpaneeya Adhyaya (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms such as santarpana and apatarpana	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO3,CO5	Enlist santarpanadravya Ch Su 23/3-5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3	Enlist santarpanajanyavyadhis Ch Su 23/5-7	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Explain chikitsa-sutra for santarpana-janya-roga. Ch.Su. 23/ 8	CAP	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3	Explain apatarpanajanya vyadhis Ch Su 23/26-29	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Outline the management approach to apatarpana janya vyadhi Ch Su 23/30-32	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 23/ 5-7, 26-29	CK	MK	K	SDL, REC	P-REC	F&S	I	
CO2	Summarize chapter as per sutra Ch Su 23/40	CC	NK	K	SDL	P-VIVA	F&S	I	
Topic 12 Cha.Su.24- Vidhishoniteeya Adhyaya (Lecture :3 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning and importance of key terms such as sonitadushti and visuddharakta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO7	Explain causative factors for raktadushti Ch.Su. 24/ 5-10	CK	MK	K	L&GD	CHK	F&S	I	

CO4,CO6	Explain diagnostic criteria of raktadushti. Ca.Su. 24/17	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO6,CO7	Enlist rakta-dushtijanya-roga. Ch.Su. 24/11-16, 28/11-13	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain treatment principles of rakta-dushti. Ch.Su. 24/18**.**	CC	MK	K	L&GD	INT,VV-Viva	F&S	I	
CO3,CO4,CO7	Explain visudha-rakta lakshana Ch Su 23/22	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO5	Explain visuddha-rakta-purusha lakshana Ch Su 23/24	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO3,CO6,CO7	Relate the concept of raktadushti with similar references such as Ch.vi. 5/26	CC	MK	KH	DIS	T-OBT	F	I	
CO4,CO5,CO7	Explain pathya in raktamoksha Ch Su 24/23	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5,CO6	Summarize the samprapti of mada, murchaya and sanyasa Ch Su 24/25-29	CAP	DK	KH	L&GD,IBL,RP	PUZ,TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 24/ 14,18,20,21,22,24	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO2	Summarise the chapter as per sutra Ch Su 24/59-60	CC	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 13 Cha.Su.25- Yajjapurusheeya Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1	Justify the position of the Yajjapurusheeya chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	

CO2	Explain basic meaning and importance of key terms in the chapter such as Hita, Ahita, Pathya and Apathya	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO4,CO7	Justify the role of different factors responsible for formation of purusha Ch Su 25/3-29	CC	DK	KH	L&GD,ML	TT-Theory,VV-Viva	F&S	I	
CO1,CO8	Appreciate importance of sambhasha in bringing out scientific conclusions	AFT-REC	NK	KH	L&GD,RP,PL	SA,TT-Theory,VV-Viva	F&S	I	
CO2,CO3	Differentiate factors related with ahara like Aharayoni, Prabhava, udarka, Upayoga, Rasa, Gurvadi Guna etc Ch Su 25/36	CK	MK	KH	L&GD,LS	T-OBT,TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO5	Enlist important agryas related with aushadha, anna and vihara Ch Su 25/38-40	CK	DK	K	L&GD,FC,GBL	T-OBT,TT-Theory,VV-Viva	F&S	I	H-DG,H-RN
CO4,CO5,CO7	Define pathya and explain its importance Ch Su 25/45-47	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO7,CO8	Justify importance of hitahara and ahitahara (See activity list)	CAP	DK	KH	DIS,FC	INT,TT-Theory,VV-Viva	F&S	I	
CO5	Mention asavayonis Ch Su 25/49	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 25/ 29,31,33,45,46,47,50	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1	Summarize the chapter with shloka number Ch Su 25/51	CK	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 14 Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya (Lecture :3 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its	CC	MK	K	L&G	INT,TT-Theor	F&S	I	

	importance				D	y,VV-Viva			
CO2	Explain basic meaning and importance of key terms such as dravyaprabhava, gunaprabhava, rasapanchaka and viruddha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	I	
CO2,CO3,CO5	Enlist gunas of parthivadi dravyas Ch Su 26/11	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Differentiate dravyaprabhava and gunaprabhava with examples Ch Su 26/13	CK	MK	KH	L&GD	PUZ,TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5	Explain dravyakarmukata siddhant with examples Ch Su 26/13	CK	MK	KH	L&GD,DA	TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5,CO6	Explain the importance of paradi gunas as chikitsopayogi gunas (in diagnosis and treatment). Ch Su 26/29-35 (see activity list, activity no.5)	CK	DK	KH	L&GD,FC,SDL	TT-Theory,VV-Viva	F&S	I	
CO2,CO5	Complement the existing knowledge of ‘rasadi panchaka’ with additions from Charakasamhita.	CK	DK	K	FC,SDL	T-OBT,TT-Theory,VV-Viva	F&S	I	
CO2,CO5	Differentiate the properties of three types of ‘Vipakas’ Ch Su 26/58-63	CK	MK	K	DIS,FC	TT-Theory,VV-Viva	F&S	I	
CO4,CO5	Explain method of perception of rasa,veerya and vipaka of dravyas Ch Su 26/66	CC	MK	KH	L&GD,D	DEB,TT-Theory,VV-Viva	F&S	I	H-DG
CO2,CO4,CO5	Enlist the examples of prabhava Ch Su 26/68-70	CK	MK	K	L&GD,EDU,SDL	TT-Theory,VV-Viva	F&S	I	H-DG
CO4,CO5,CO7	Enlist the types of viruddhaahara and principles of management of diseases caused by viruddhaahara. Ch Su 26/86, 104-105	CK	MK	K	L&GD,BL,	P-PS,TT-Theory,VV-Viva	F&S	II	

					RLE				
CO4,CO5	Illustrate vichitra-pratyayarabdha with examples Ch Su 26/48-52	CAP	MK	KH	DIS,IBL	P-ID,TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite the shlokas Ch Su 26/13,36,37,61,62,66,81,85	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO4,CO5	Relate different sidhantas on dravya mentioned in Ch.Su1, Ch Su 4, Ch Su 27 and Ch Vi 1	CC	MK	KH	DIS,FC	CL-PR	F	I	
CO1,CO2	Summarize the chapter as per sutra Ch Su 26/107-113	CK	NK	K	SDL	TT-Theory,VV-Viva	F&S	II	
Topic 15 Cha.Su.27- Annapaana vidhi Adhyaya (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2,CO5,CO7	Enlist the characteristics of hitahara and examples of hitaahara and ahitaahara. Ch Vi 27/3	CK	MK	K	SDL	P-VIVA	F&S	I	
CO2,CO5,CO7	Classify ahara into different vargas Ch Su 27/26	CK	MK	K	FC,SDL	P-VIVA	F&S	I	
CO4,CO5,CO7	Illustrate ahara-dravya through exhibition (See activity list, activity no.7)	CS	DK	SH	PrBL,RLE	Log book,TR	F	I	
CO1,CO2	Summarise the chapter as per Ch Su 27/351-352	CC	NK	K	SDL	TT-Theory,VV-Viva	F&S	I	
Topic 16 Cha.Su.28- Vividhashitapeeteeya Adhyaya (Lecture :4 hours, Non lecture: 14 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	I	
CO2	Explain basic meaning of key terms in the chapter such as	CK	MK	K	L&G	QZ ,COM,TT-	F&S	I	

	chaturvidha ahara, vyadhisaha sareera, dhatu-upadhatu-mala-indriya-pradoshajavyadhi				D,BS	Theory,VV-Viva			
CO2,CO7	Enlist the four types of aahara Ch Su 28/3	CK	MK	K	L&GD,ML	M-CHT,VV-Viva	F&S	I	
CO2,CO7	Explain factors influencing susceptibility to diseases which modify the effects of pathya and apathya Ch Su 27/7	CK	MK	KH	L&GD,SDL	TT-Theory,VV-Viva	F&S	I	
CO3,CO7	Enlist the vyadhi- asaha shareera Ch Su 27/7	CK	MK	KH	L&GD,IBL	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO5,CO7	Outline dhatu-upadhatu-mala-indriya pradoshaja vyadhi (diseases caused by doshas situated in different dhatus, upadhatus, malas and indriyas) explain their treatment principles Ch Su 27/9-30	CC	MK	KH	L&GD,IBL,LS	T-OBT,M-CHT,TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO7	Explain mechanism koshtagati and sakhagati Ch Su 27/31-33	CC	MK	KH	L&GD,FC	TT-Theory,VV-Viva	F&S	I	
CO3,CO7	Emphasize the role of Prajnaparadha in causation of diseases Ch Su 27/39-40	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	I	
CO1,CO2	Recite sutras Ch Su 27/9-19,35-39, 45	CK	MK	K	SDL,REC	P-REC	F&S	I	
CO1,CO2	Summarize the chapter as per Ch Su 28/45-48	CK	NK	K	SDL	T-OBT,TT-Theory,VV-Viva	F&S	I	
CO3,CO6	Relate dhatupradoshaja vyadhi with explanations in other contexts such as Ch.vi. 5/ 10-22, Ch.Su. 28/ 09- 19, Ch.Vi. 5/8 and dhatugatha avastha described in Ashtangasangraha Sutasthana	CC	DK	KH	DIS,BS	CL-PR	F	I	

Topic 17 Cha.Su.29- Dashapraanaayataneeya Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as pranaayatan, praanabhisara, rogaabhisara, chadmachara, yogya chikitsak, karma kovidah.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Enlist dasha praanayatanas. Ch Su 29/3,4	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Enlist two types of bhishak. Ch Su 29/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Explain the qualities of pranaabhisar, rogabhisara and bhishakchadmacahara Ch Su 29/7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Appreciate the social hazards caused due to quackery	AFT-REC	DK	KH	BS,SDL	CR-W,VV-Viva	F&S	II	
CO8	Enlist qualities of yogya chikitsak Ch Su 29/ 13.	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO8	Illustrate characteristics of different types of vaidya through skit (see activity no.8)	PSY-SET	DK	SH	RP,FV	PRN	F	II	
CO1,CO2	Recite sutras Ch Su 29/3,4,13.	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch. Su 29/14	CK	MK	K	SDL	T-OBT,TT-Theory,VV-Viva	F&S	II	
CO8	Relate different references related to good qualities of Vaidya from different chapters Ch Su 11/50-53	CC	MK	KH	FC	CL-PR,DEB	F	II	

Topic 18 Cha.Su.30- Arthedashamahamooleeya Adhyaya (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as artha, mahamula, mahaphala, shashwatatva	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Explain the importance of hrudaya. Ch Su 30/3,4,5,6,7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Relate concept of hridaya with details given in trimarmeeya, sareerasthana etc.	CK	MK	KH	L&GD,FC	T-OBT	F	II	
CO3,CO4,CO7	Explain the importance of ojas and its sthana Ch Su 30/8-12.	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Define terms dhamani, srotas, sira. Ch Su 30/12	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Explain shresthatama bhava Ch Su 30/15	CK	NK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO5,CO8	Explain Ayurvedavid lakshana and their method of understanding in the form of vakyashah, vakyarthashah, arthavayavashah Ch Su 30/16	CK	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Outline lakshana of sukhayu, asukhayu, hitayu and ahitayu Ch Su 30/24, 25	CK	DK	KH	L&GD,IBL	PUZ,TT-Theory,VV-Viva	F&S	II	
CO3,CO4	Define objective (prayojana) of Ayurveda Ch Su 30/26	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO5,CO8	Appreciate eternity of Ayurveda Ch Su 30/27	CC	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	

CO3,CO4,CO7,CO8	Explain qualities of learner of Ayurveda and their objectives. Ch Su 30/29	CC	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO7	Enlist dashaprakaran of tantraartha. Ch Su 30/32.	CK	MK	KH	L,L&GD	P-VIVA,TT-Theory,VV-Viva	F&S	II	
CO3,CO4	Outline the ashtasthanas of Charaka Samhita Ch Su 30/32	CK	MK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO3,CO4,CO6	Enlist paryayas of Ayurveda. Ch Su 30/31	CK	MK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO4,CO5	Explain characteristics of pallavagrahi bhishak or consequences of incomplete knowledge with examples Ch Su 30/72-81.	CK	DK	K	L&GD	TT-Theory,PP-Practical,VV-Viva	F&S	II	
CO3,CO5,CO8	Appreciate importance of Shastra jnana Ch Su 30/84-85	AFT-VAL	DK	KH	L&GD,BS	VV-Viva	F&S	II	
CO1,CO2	Explain importance of sangraha adhyayas	CC	DK	K	BL,SDL	VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Su 30/3,410,11,12.	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarize the chapter as per sutras Ch Su 30/86-87	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 19 Cha.Ni.01-Jwara nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Describe the sthana adhikarana (objectives) of Nidanasthana Ch.Ni.1/15	CK	MK	K	L	P-VIVA,TT-Theory	F	II	

CO1	Justify the position of the chapter in the samhita and its importance	CK	MK	K	L	T-EMI	F	II	
CO2	Explain basic meaning and importance of key terms such as nidanapanchaka and jwara	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Explain nidanapanchaka with suitable examples. Ch.Ni.1/6-13	CK	MK	KH	L&GD,FC	P-VIVA,TT-Theory	F&S	II	
CO4,CO6	Differentiate vyadhibodhaka nidana and vyadhi janaka nidana Ch Ni 1/1 Cakrapani commentary	CAN	DK	KH	L&GD,TBL	VV-Viva	F	II	
CO2,CO4,CO6	Enlist synonyms of nidana (causative factors) and roga (disease) Ch Ni 1/3,5	CK	MK	KH	L	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Explain the importance of nidanapanchaka Ch.Ni 1/13	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO6	Explain nidanapanchaka and elaborate nidana (causative factor), purvarupa (premonitory symptoms) lakshana/rupa (symptoms)	CK	MK	KH	L&GD	T- EW	F	II	
CO4,CO6,CO7	Describe upashaya along with its types in detail Ch Ni 1/10	CC	MK	SH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Interpret the classification of samprapti (pathogenesis) Ch Ni 1/12	CK	MK	KH	L&PPT,CBL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Diffrentiate the samanya and vishesha samprapti of disease	CAP	MK	SH	L_VC,DIS	TT-Theory,VV-Viva	F&S	II	
CO3,CO4	Describe the vishesha nidana (specific factors of diseases) prakopa karana (causes of aggravation),samprapti (pathogenesis)	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F	II	

	and lakshana (symptoms) of jwara (fever)								
CO3,CO6	Outline vataja, pittaja, kaphaja, samsarga and sannipataja jwara Ch Ni 1/19-30	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO6	Describe agantuja jwara nidana (causes factor of exogenous fever) Ch Ni 1/30,31	CK	MK	KH	L	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO5	Differentiate nava and jeerna jwara chikitsa sutra (line of treatment) Ch Ni 1/36	CK	MK	K	L,L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni/3,5,7-11,38-40	CK	MK	K	SDL,REC	P-REC	F	II	
CO1,CO2	Summarize the chapter as per sutras given at the end of the chapter Ch Ni 1/42-44	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 20 Cha.Ni.02-Raktapitta nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as pratimargaharana, sadhyasadhyata, raktapitta	CK	MK	KH	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Justify raktapitta paryaya and nirukti Ch Ni 2/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Outline raktapitta nidana and samprapti (etiology and pathogenesis of raktapitta)	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO6	Define raktapitta and outline raktapitta purvarupa (premonitory features of raktapitta) upadrava (complication of raktapitta) Ch Ni 2/6,7	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	

CO4,CO6	Relate concept of trividha gati (adha, urdhwa, tiryag) with samprapti of raktapitta Ch Ni 2/8	CAP	DK	KH	L&GD	T-EMI,TT-Theory,VV-Viva	F&S	II	
CO4,CO5,CO7	Explain concept of pratimargaharana in the context of raktapitta Ch Ni 2/9	CAP	MK	KH	L&GD,LS	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Illustrate sadhyasadhyata of raktapitta Ch Ni 2/9,12-20	CAP	MK	KH	L&GD,PL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Outline asadhya lakshana of raktapitta (features of incurable disease) Ch Ni 2/23-26	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni/19,27	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO2	Summarize the chapter as per sutra Ch Ni 2/28,29	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 21 Cha.Ni.03-Gulma nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as gulma, panchagulma and raktagulma	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Demonstrate the prakruti samasamveta and vikruti vishama samaveta siddhanta in the context of gunma Ch.Ni 3/6	CAP	DK	KH	L&GD,IBL	INT,TT-Theory,VV-Viva	F	II	
CO3,CO6	Mention the importance of gulmasthana in samprapti Ch Ni 3/7	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO6	Outline the features of vataja-pittaja-kaphaja and raktaja gulma along with samprapti lakshana (pathogenesis and clinical features) Ch Ni 3/6-11	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	

CO3,CO6	Describe raktaja gulma samprapti, lakshana (pathogenesis and clinical features) Ch Ni 3/13-14	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Outline poorvarupa of gulma Ch Ni 3/15	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO5	Outline treatment principle of gulma Ch Ni 2/16,17	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch Ni 3/18	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 22 Cha.Ni.04-Prameha nidana adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as kleda, vikaravighatakara bhava	CK	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	II	
CO3,CO4,CO6	Describe the concept of kleda and its role in samprapti of prameha Ch Ni 4/6-8	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO4,CO6,CO7	Summarise the sankhyasamprapti of prameha Ch Ni 4/11,25,39	CK	MK	K	L	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Enlist causative factors and samprapi ghatakas in prameha Ch Ni 4/7	CK	MK	K	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explore the sootra ‘eha khalu nidan-dosha-dooshya vishesahebhyo…..’ in the manifestation of diseases Ch Ni 4/4	CAP	MK	KH	L&GD,BS,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Relate nidana, dosha, dushya and samprapti of vataja, pittaja and kaphaja prameha Ch Ni 4/5,8,24,36,37	CC	MK	KH	L&GD,CB	TT-Theory,VV-Viva	F&S	II	

					L				
CO2,CO3,CO6	Justify the role of samprapti ghatakas in diagnosed cases of prameha	PSY-SET	NK	SH	L&GD,CBL,D_BED	P-PS,TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO4,CO5	Outline the chikitsas sutra of prameha Ch Ni 4/49	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO4,CO6	Explain sadhyasadhyata of prameha Ch Ni 4/11,27,38	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Describe purvarupa and upadrava of prameha Ch Ni 4/47,48	CC	MK	K	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO3,CO7	Relate predisopsing factors of prameha with present day lifestyle	CAP	DK	KH	DIS,FC	VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni 4/3,4,48,49	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch Ni 4/53-55	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 23 Cha.Ni.05-Kushta nidana Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as saptadravya, saptakushta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Enlist and explain saptadravya of kushta Ch Ni 5/3	CC	MK	KH	L&GD,CB	TT-Theory,VV-Viva	F&S	II	

					L				
CO2,CO3,CO6	Explain the role of ‘kleda’ in the manifestation of kushta Ch Ni 5/3	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO3,CO6	Outline anekarupa of kushta (multiplicity) based on vedana, varna, samsthana and prabhava Ch Ni 5/4	CC	DK	KH	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO3,CO6	Enlist saptakushta with their dosha predominance Ch Ni 5/5	CK	MK	K	L&GD,BL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Outline samanyanidana of kushta Ch Ni 5/6	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO4,CO6	Enlist purvarupa of kushta Ch Ni 5/7	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO4,CO6	Outline upadrava of kushta Ch Ni 5/11	CC	DK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explain sadhyasadhyata of kushta Ch Ni 5/9	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni 5/3,5	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch Ni 5/16	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 24 Cha.Ni.06-Shosha nidana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	

CO2	Explain basic meaning and importance of key terms such as chaturvidha ayatana and ekadasarupa	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explain role of four aetiological factors (chaturvidha-ayatana) in samprapti of shosha. Ch Ni 6/4,6,7(1),8,10	CC	MK	KH	L&PPT,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Enlist ekadasarupa of shosha Ch Ni 6/14	CK	MK	K	L&GD,ML	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Outline the purvarupa of sosha Ch Ni 6/13	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Explain sadhyasadhyata of shosha Ch Ni 6/15,16	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Relate concept of dharaneeya adharaneeya vega to the context of shosha nidana	CAP	MK	KH	DIS	CL-PR	F	II	
CO3,CO4,CO7	Justify the importance of ashtaahara vidhi visesha ayatana in the context of prevention of shosha	CAP	MK	KH	DIS,FC	CL-PR	F	II	
CO1,CO2	Recite sutras Ch Ni 6/3,5,7,9,11,14	CK	MK	K	SDL, REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter as per sutra Ch 6/17	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 25 Cha.Ni.07-Unmada nidana Adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance`	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as ashtavibhrama, doshonmada and bhutonmada	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	

CO2,CO3,CO6	Define unmada and enlist ashtavibhrama Ch N 7/5	CK	MK	K	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Illustrate ashtavibhrama in different types of unmada	CAP	NK	KH	L_VC,CBL	TT-Theory,VV-Viva	F	II	
CO4,CO6,CO7	Explain sankhyasamprapti of unmada Ch Ni 7/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Interpret unmada abhimukha karana (predisposing factors for unmada) in the contemporary scenario Ch Ni 7/3-4	CC	DK	KH	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Interpret the role of prajnaparadha as an important etiological factor in the background of unmada Ca.Ni. 7/19-22	CC	DK	KH	L&GD,L_VC	CR-RED,TT-Theory,VV-Viva	F&S	II	
CO4,CO6,CO7	Summarise different descriptions of concept of prajnaparadha as aetiological factor Ch Su 8, 11, Ch Vi Ch Sa 1, Ch Vi 3	CC	MK	KH	DIS,FC	PRN	F	II	
CO2,CO3,CO6	Outline the purvarupa of unmada Ch Ni 7/6	CC	DK	K	L_VC,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO5	Explain chikitsasutra of unmada Ch Ni 7/8,9	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO4,CO6	Differentiate doshonamda and bhutonmada Ch Ni 7/10-11	CC	DK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO6	Summarize causes, features purpose (prayojana) and treatment of agantu unmada Ch Ni 7/12-17	CK	DK	K	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutras Ch Ni 7/ 3,5,19-22	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter based on Sutra Ch Ni 7/24	CK	NK	K	SDL	T-OBT	F&S	II	

Topic 26 Cha.Ni.08-Apasmara nidana adhyaya (Lecture :2 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as nidanarthakara roga, vyadhisankara, tiryaggata dosha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Define apasmara Ch Ni 8/5	CK	MK	K	L,L&PPT	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain apasmaraabhimukhakarana (predisposing factors of apasmara) Ch Ni 8/4	CK	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Outline visesha-lakshana of apasmara Ch Vi 8/8	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain cikitsasutra of apasmara Ch Ni 8/10	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain nidanarthakara roga Ch Ni 8/16-19	CC	MK	KH	L&GD,L_VC,CBL	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO6	Explain vyadhisankara Ch Ni 8/21-22	CC	MK	KH	L&PPT,L_VC,CBL	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO4,CO5	Differentiate sudha and asuddha chikitsa Ch Ni 8/23	CC	MK	KH	L&GD,BS,CBL	TT-Theory,VV-Viva	F&S	II	

CO2,CO4,CO6	Define and relate different types of sadhyasadhyata Ch Ni 8/33-35	CC	MK	KH	DIS,PBL,CBL,PER	TT-Theory,VV-Viva	F&S	II	H-RN
CO2,CO4,CO5	Describe tiryaggatadosha - cikitsasutra Ch Ni 8/36-39	CK	MK	K	L&GD	TT-Theory	F&S	II	
CO6,CO8	Document experiences of physicians on nidanarthakara roga (Activity no.9)	PSY-SET	DK	KH	DIS,TPW	C-INT	F	II	
CO4,CO6,CO7	Summarise the information gathered from Nidanasthana through Quiz (activity no.10)	CAP	DK	KH	FC,D	QZ	F	II	
CO1,CO2	Recite sutras Ch Ni 8/3, 5, 16-22, 33-35,36-39	CK	MK	K	SDL,REC	P-REC	F&S	II	
CO1,CO2	Summarise the chapter based on sutra 42-44	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 27 Cha.Vi.01- Rasa vimana Adhyayam (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Explain sthana adhikarana of (objectives) of Vimanasthana Ch Vi 1/3	CK	MK	K	L&GD,LS	CR-W,TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO4	Explain basic meaning and importance of key terms such as prakritisama samaveta, vikirti vishama samaveta, ahara vidhi visesha ayatana, satmya	CK	MK	K	DIS,PrBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO4	Explain the prakrutisamasamavet and vikrutivishamasamavet siddhanta with suitable examples. Ch Vi 1/9,10	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	H-DG
CO2,CO4,CO5	Explain chaturvidha prabhava(rasa-dravya-dosh-vikara prabhava) with examples Ch Vi 1/12	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	H-DG

CO2,CO4	Describe the dravyaprabhava in taila,ghrita and madhu with the help of 'samanya vishesha siddhanta' Ch Vi 1/14	CC	MK	KH	L&GD,BL	DEB,TT-Theory,VV-Viva	F&S	III	
CO2,CO5,CO7	Explain the dravyas which should be avoided for regular consumption Ch Vi 1/15-19	CC	MK	KH	L&GD,RLE	M-CHT,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Explain satmya and its types Ch Vi 1/20	CC	MK	KH	L&GD,BS	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Summarize ashta aharavidhivisheshayatana and its role in preservation of health. Ch Vi 1/20-23	CK	MK	K	L&GD,PSM	DEB,TT-Theory,VV-Viva	F&S	III	H-SW
CO2,CO4,CO7	Relate concept of satmya with satmyapareeksha Ch.Vi 8	CC	MK	KH	DIS	CL-PR	F	III	
CO2,CO7	Explain aharavidhi vidhana and bhojya sadgunya Ch Vi 1/24,25	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	H-SW
CO3,CO7	Appreciate the importance of popularizing importance of dietary rules (see activity list)	CAP	DK	KH	PrBL	Log book	F	III	
CO4,CO5	Differentiate and apply samanagunadravya and samanagunabhuyishtadravya Ca Vi 1/7	CAP	NK	KH	DIS	CL-PR	F	III	
CO1,CO2	Recite sutras Ch Vi 1/9,10,20,24	CK	MK	K	SDL,REC	P-VIVA,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on sutra Ch Vi 1/27,28	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 28 Cha.Vi.02-Trividha kuksheeya Adhyayam (Lecture :2 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	

CO2	Explain basic meaning of key terms such as trividha kukshi, matra-amatra ahara, amadosha, amavisha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Explain aharamatra based on trividha kukshi Ch Vi 2/3	CC	MK	KH	L&GD,IBL	C-INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain the matravat ahara (ideal quantity of food) and amatravatwa of ahara with its types Ch Vi 2/6	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO4,CO7	Justify effects of heenamatra and atimatra ahara Ch Vi 2/7	CAP	MK	KH	L&GD,PBL,FC	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Enlist and explain the mental factors affecting digestion of food Ch Vi 2/8	CC	MK	KH	L_VC,EDU	TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Outline hetu, linga and aushadha of two types of amadosha Ch Vi 2/10-13	CC	MK	KH	L&PPT,CBL,PER	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain the concept of amavisha Ch Vi 2/12	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4	Define amasaya with reference to its position Ch Vi 2/17	CK	MK	K	L&GD,D-M	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Recite sutras Ch Vi 2/9	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO2	Summarize the chapter based on sutra Ch Vi 2/19	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 29 Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms like janapadodhwamsa, daiva and purushakara	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO5	Justify the importance of timely collection of medicines Ch Vi 3/4	CAP	DK	K	L&GD,BS	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Enlist the commomn causes of janapadodhwamsa Ch Vi 3/6	CC	MK	KH	L&GD,BS,FC	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Describe the lakshanas of dushti of vayu, jala, desha and kala. Ch Vi 3/7	CC	MK	KH	L_VC,PBL,RP	TT-Theory,VV-Viva	F&S	III	
CO4,CO7	Interpret janapadodhvamsa in contemporary epidemiology (see also activity list)	CAP	NK	KH	DIS,BS,PBL,FV	Log book,VV-Viva	F&S	III	
CO2,CO5	Summarize the treatment principles of janapadodhwamsakara vikaras Ch Vi 3/12-18	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain the role of adharma in janapadodhwamsa Ch Vi 3/20	CC	MK	KH	DIS,BS	DEB,TT-Theory	F&S	III	
CO2,CO7	Outline the concept of Niyat and Aniyat Ayu. Ch Vi 3/28-35	CC	DK	KH	L&GD,PBL	DEB,TT-Theory,VV-Viva	F&S	III	
CO3,CO4,CO	Relate concept of daiva and purushakara with references Ca Sha	CC	MK	KH	DIS,F	CL-PR	F	III	

7	2/44. Ca Sh 6/27.				C				
CO2,CO4,CO7	Differentiate daiva and purushakara Ch Vi 3/29-30	CC	MK	K	L&GD,BS	CR-W,TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Explain hetuviparit chikitsa in jwara Ch Vi 3/39-40	CC	MK	KH	L&GD,CBL	INT,TT-Theory,VV-Viva	F&S	III	
CO4,CO5	Explain apatarpana and its types. Ch Vi 42-44	CC	MK	KH	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Explain concept of desha Ch Vi 3/47-48	CC	MK	K	L_VC,DIS,FV	PA,TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO7	Summarise the term karma with reference to different contexts	CC	MK	KH	DIS,FC	PRN	F	III	
CO1,CO2	Recite sutras Ch Vi 3/6,10	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on sutra Ch Vi 3/49-52	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 30 Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as trividha roga visesha vijnana	CK	MK	K	L&GD	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain the application of aptopadesha, pratyaksha and anumana	CC	MK	KH	L,CB	P-PS,TT-Theo	F&S	III	H-RN

	in clinical examination. Ch Vi 4/3-8				L	ry,VV-Viva			
CO2	Recite sutra Ch Vi 4/4,12	CK	MK	K	SDL, REC	P-VIVA,P-REC	F&S	III	
CO1,CO2	Summarise the chapter as per sutra no. Ch Vi. 4/13-14	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 31 Cha.Vi. 05- Sroto vimana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as srotas, srotodushti	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explain importance of srotas Ch Vi 5/3-4	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2	Enlist the types of srotas Ch Vi 5/7	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain types and general causative factors of srotodushti Ch Vi 5/23,24	CK	MK	K	L&GD	T-OBT,TT-Theory,VV-Viva	F&S	III	H-RN
CO4,CO5	Explain hetu, lakshan and chikitsa of specific strotodushti Ch Vi 5/8, 10-22, 26-28	CK	MK	K	L&GD,CBL	TT-Theory,VV-Viva	F&S	III	H-RN
CO1,CO2	Recite sutras Ch Vi 5/3,4,7,9-27	CK	MK	K	SDL, REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter based on Ch Vi5/28-30	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 32 Cha.Vi. 06-Roganika vimana adhyaya (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as roganeeka, anubandhya, anubandhy	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO3	Enlist the types of diseases based on prabhav, bala, adhishtana, nimmitta, ashay. Ch Vi 6/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	H-RN
CO2	Explain the rationale behind classification of diseases. Ch Vi 6/4	CC	MK	KH	L&GD,BS	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Enlist the diseases caused by shareera and manas doshas.Explain the relation between shareera and manasa doshas. Ch Vi 6/6-9	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain anubandhya and anubandha doshas Ch.Vi6/11	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO7	Explain four types of agni. Ch Vi 6/12	CK	MK	K	L&GD,PL	TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Enlist types of shareera prakruti Ch Vi 6/13	CK	MK	K	L&GD	P-ID,TT-Theory,VV-Viva	F&S	III	
CO2,CO7	Summarize the treatment principles of Prakrutika doshas (Vatala ,Pittal,Shlemal Prakrutis) Ch Vi 6/14-18	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Enlist qualities of Rajavaidya Ch Vi 6/19	CK	MK	K	L,RP	P-RP,VV-Viva	F&S	III	
CO1	Summarize the chapter based on sutras Ch Vi 6/42-44	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 33 Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya (Lecture :2 hours, Non lecture: 2 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as dvividah vyadhita prurusha	CK	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO2,CO3	Explain two types of vyadhit purusha (guru vyadhita and laghu vyadhita) Ch Vi 7/3,4	CC	MK	KH	L,RP	TT-Theory,VV-Viva	F&S	III	H-RN
CO2,CO8	Explain two types of vaidya (jnani and ajnani) Ch Vi 7/4	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4,CO5	Enlist the types of krimis (see activity list also) Ch Vi 7/9	CC	MK	KH	L&GD,FC,EDU	QZ ,PUZ,TT-Theory,VV-Viva	F&S	III	H-RN
CO4,CO5	Explain the trividha chikitsa Ch Vi 7/14	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2	Recite sutra Ch Vi 7/28	CK	MK	K	REC	VV-Viva	F&S	III	
CO1,CO2	Summarize the chapter with the help of Slokas 31 and 32	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 34 Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. (Lecture :5 hours, Non lecture: 11 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2,CO4	Explain the basic meaning and importance of sastrapareeksha, trividha upaya, tadvidyasambhasha, karya abhiivritti ghataka, dasavidha pareekshyabhava, dasavidha atura pareeksha	CC	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explain shashtrapareeksha. Ch Vi 8/3	CC	MK	K	L&GD,BL	DEB,TT-Theory,VV-Viva	F&S	III	

CO2	Enlist the three means of knowledge (trividha upaya). Ch Vi 8/6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2	Explain the adhyayan and adhyapana vidhi. (also see activity list) Ch Vi 8/7,8	CK	MK	K	L,W	SA,VV-Viva	F&S	III	
CO1,CO2	Outline sambhashavidhi C Vi 8/16-18	CK	DK	KH	L&GD,EDU	DEB,TT-Theory,VV-Viva	F&S	III	
CO1	Describe three types of parishat Ch Vi 8/19,20	CK	DK	K	L,RP,SDL	P-RP,VV-Viva	F&S	III	
CO1,CO2	Enlist vadamarga padani Ch Vi 8/27	CK	DK	K	L,FC	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Explain dashavidha pareekshya bhavas. Ch Vi 8/68-77, 84	CK	MK	K	L&GD,BL	QZ ,TT-Theory,VV-Viva	F&S	III	
CO3,CO4,CO6,CO7	Explain dhatusamya pareeksha Ch Vi 8/89	CC	MK	KH	L,DIS	CHK,TT-Theory,VV-Viva	F&S	III	
CO1,CO2,CO6	Explain dashavidha aturapareeksha. Ch Vi 8/94 -123	CC	MK	KH	L&GD,CBL	PUZ,TT-Theory,VV-Viva	F&S	III	H-RN
CO1,CO2	Recite the sutras Ch Vi. 8/ 3,6 68-78.	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarize the chapter with the help of shlokas 52-56	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 35 Cha.Sha.01-Katithapurusheeya Adhyaya (Lecture :2 hours, Non lecture: 3 hours)									
CO1,CO2	Describe the sthana adhikarana (objectives) of sharirasthana Cha.Sha 8/69	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms purusha, mana, atma, yoga and moksha	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Define ekadhatupurusha, shaddhatvatmak purush, chaturvimashataika purusha and rashi purusha, Ca Sh 1/16, 17, 35	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO4	Explain lakshana, guna, vishaya and karma of manas and its role in jnanotpatti krama Ca Sha 1/ 18-24	CC	MK	K	L&GD,FC	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Enlist ashtaprakruti and shodasha vikara. Ca Sha 1/63-64	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Explain srusthiutpatti krama and pralaya Ca Sha 1/ 66-69	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Identify atmalinga as basic features of living organism Ca Sha 1/70-74	CC	MK	K	DIS,FC	TT-Theory,VV-Viva	F&S	II	
CO2,CO5	Explain naishtiki chikitsa Ca Sha 1/86-94	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Explain dukhahetavah (causes of misery) Ca Sha 1/98	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO4,CO7	Outline asatmyendriyartha samyoga as a cause of diseases Ca Sha 1/118-128.	CC	MK	KH	L&GD,FC	DEB,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO	Define and explain prajnaaparadha, with terms dhivibhramsha,	CC	MK	KH	L&G	TT-Theory,V	F&S	II	

7	dhruti vibhramsha, smriti vibhramsha.Ca Sha 1/99-102.				D	V-Viva			
CO2,CO4,CO7	Describe vedana, vedana adhishtana and vedana nivrutti Ca Sha 1/134-137.	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Define state of Yoga Ca Sha 1/138-141	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Outline mokshaprapti upaya. Ca Sha 1/142-146	CC	DK	KH	L&GD,BS	P-VIVA,TT-Theory	F&S	II	
CO1,CO4,CO7	Explain lakshana of Prashaanta Bhutaatma. Ca Sha 1/155-156	CK	DK	K	L&GD	VV-Viva	F&S	II	
CO2,CO3,CO4,CO7	Enlist and explain smriti hetu Ch Sha 1/148-149	CC	MK	KH	L&PPT	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Relate smritihetus with process of learning	CAP	NK	KH	L_VC,BS	VV-Viva	F	II	
CO3,CO8	Illustrate smritihetus through game (activity no.11)	PSY-SET	DK	SH	EDU,SDL,PSM,GBL	O-GAME	F	II	
CO1,CO2	Recite sutras Cha.Sha.16 -23, 28-30,36, 63, 64,70-74, 98,102,109,137-139, 148,149	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO2	Summarize the chapter based on sutra Ca. Sha 1/ 156	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 36 Cha.Sha.02-Atulyagothreeyam Adhyaaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Shareerasthana and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	

CO2	Explain basic meaning and importance of key terms in the chapter atulya-gotra, beeja, dwireta, kliba, prajnaparadha, pratikarma, daiva	CK	DK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlist prerequisites for conception Ch Sha 2/4	CK	MK	K	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Summarize the factors affecting conception, foetus Cha Sha 2/6-12	CK	DK	K	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Enlist shodasa dhatu (16 factors) in the formation of fetus Ch Sha 2/32,33	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outline features of multiple pregnancies, dwireta (hermaphroditism) and other types of sexual abnormalities Ca sh 2/12-14, 18-21	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain lakshanas of sadyogruhit garbhini lakshana. Ca Sha 2/23-27	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain ativahika purusha (factors carrying from previous birth to next birth). Ca Sha 2/31-32	CK	MK	K	L&GD,IBL	CR-W,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Differentiate daivakara and purushaakara Ca Sha 2/44.	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7,CO8	Explain niroga lakshana. Ca sha 1/46-47	CK	DK	K	L&GD,CBL	CHK,TT-Theory,VV-Viva	F	II	
CO1,CO2	Recite sutras Cha.Sha.2/26, 27, 35,44,45-47	CK	MK	K	SDL, REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize thechapter based on Ca Sha 2/48	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 37 Cha.Sha.03-Khuddika garbhavakranti Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Shareerasthana and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as matrija, pitrija, sattvaja, satmyaja, rasaja, atmaja bhavas, beeja and beejabhaga	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlist factors responsible for the formation, growth of the embryo Cha Sha 3/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO3,CO7	Outline the sambhasha parishat on garbha utpatti (formation of embryo) and factors contributed from different agents like satva, satmya etc. Ch Sha 3/4	CK	DK	K	L&GD	PRN,DEB	F&S	II	
CO3,CO7	Explain matruja, pitruja, atmaja, satmyaja, rasaja, satvaja bhavas of garbha Ch Sha 3/6-14	CK	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Explain role of beeja-beejabhaga dushti in congenital abnormalities Ch Sha 3/17	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Recite sutras no Ch Sha 3/17	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1	Summarize the chapter based on sutra Ch Sha 3/26-27.	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 38 Cha.Sha.04-Mahatee garbhavakranti Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Shareerasthana and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms such as garbhopaghatakar bhava, manas prakriti.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	

CO3,CO7	Define garbha Ch. Sha 4/5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Enlist components of shad dhatvaatmak purush Ca Sh 4/6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain functions of atma in the formation of garbha. Ch sha 4/8	CK	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outline maasanumasik garbha poshana Ch Sha 4/9-11,20-24	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Explain garbhopaghatakara bhavas. Ch Sh 4/18	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Summarize the causes of congenital abnormalities Ch Sha 4/30-32	CK	MK	K	L&GD	P-POS,TT-Theory	F&S	II	
CO3,CO7	Explain qualities of satva-raja-tama. Cha Sh 4/36	CK	MK	KH	L&GD	QZ ,TT-Theory,VV-Viva	F&S	II	
CO3,CO7	Outline features of shodash manasa prakritis (sixteen types of mental constitution). Ch Sha 4/36-40	CK	DK	KH	L&GD,L_VC,CBL	PM,TT-Theory,VV-Viva	F&S	II	
CO3,CO6	Identify some important features of manasaprakriti in individuals (also see activity list)	PSY-SET	NK	SH	CBL,RP,D	P-RP,VV-Viva	F	II	
CO1,CO2	Recite sutras Ch Sha 4/6,36	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize the chapter as per sutras given at the end of the chapter Ca Sha 4/42-45.	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 39 Cha.Sha.05-Purushavichaya Shareera Adhyaya (Lecture :1 hours, Non lecture: 4 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the chapter such as lokapurushasamyata, hetwadi panchaka and satya buddhi	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO4,CO7	Define loka purusha samya siddhanta Ch Sh. 4/13; 5/3	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Illustrate loka -purusha samya siddhanta with examples Ch Sha 5/5	CAP	DK	KH	DIS,BS,PER	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Define and describe satyabuddhi Ch Sh.5/7,16-19	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Enlist and describe hetvadi panchaka Ch Sh.5/8	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO4,CO7	Illsutrate pravritti-nivritti upaya (see activity list)	CAP	DK	KH	D	P-PS,TT-Theory,VV-Viva	F	II	
CO1,CO2	Recite sutras Ch Sha 5/ 3, 5, 8,16	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize thechapter as per sutra Ch Sh 5/25,26	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	
Topic 40 Cha.Sha.06-Sareeravichaya adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the	CK	MK	K	L&G	QZ ,COM,TT-	F&S	II	

	chapter such as vriddhikara bhava, kala kaala mrityu and param ayu				D,BS	Theory,VV-Viva			
CO2	Define shareera Ch. Sh.6/4	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO4	Apply samanya visesha siddhanta in shareera Ch.Sh.6/11	CAP	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Describe shareera vruddhikara bhava Ch.Sh.6/12	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Describe bala vruddhikara bhava Ch.Sh.6/13	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Explain ahara parinamakara bhava Ch.Sh.6/14,15	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Classify shareera-gunas into malarupa and prasadarupa Ch.Sh..6/16,17	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Explain the concept of kala and Akala Mrithyu Ch.Sh 6/28	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2,CO7	Define parama ayu karanam Ch.Sh 6/30	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO7	Analyse data related to akala-mrityu (see activity list)	CAP	DK	KH	DIS,IBL,EDU	M-CHT	F	II	
CO1,CO2	Recite the sutra Ch Sha 6/4, 5-11, 12,13, 17, 28, 30	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch Sh 6/31-34	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	II	

Topic 41 Cha.Sha.07- Sareerasankhya sareera Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain the basic meaning and importance of key terms in the chapter such as chetanaadishtana, pranayathana, koshtanga, pratyanga, anjali pramana etc.	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2,CO3,CO7	Explain paramanu bheda shariram Ch Sha 7/17	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO1,CO2	Recite sutra Ch Sha 7/17	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	II	
CO1,CO2	Summarize the chapter as per sutra Ch Sha 7/19, 20	CK	NK	K	SDL	T-OBT	F&S	II	
Topic 42 Cha.Sha.08-Jathisutreeya Adhyaya (Lecture :1 hours, Non lecture: 12 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	II	
CO2	Explain basic meaning and importance of key terms in the chapter such as jathi, pumsavana, sutikagara etc	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	II	
CO2	Enlist garbha upaghatakara bhava Ch.Su 8/21	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	II	
CO2	Describe the infrastructure of a sutikagaram Ch. Su 8/33	CK	NK	K	PrBL,SDL	M-MOD,TT-Theory	F&S	II	V-BL
CO3,CO8	Demonstrate garbhopghatakarabhava through skit (see activity list)	PSY-SET	DK	KH	ML,RP	QZ ,CHK,VV-Viva	F	II	
CO1,CO2	Summarize the chapter as per the sutra Ch Sha 8/68,69	CK	NK	K	SDL	T-OBT,VV-	F&S	II	

						Viva			
Topic 43 Cha.In.1-Varnasvariyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO2	Describe sthana adhikarana (objectives) of Indriyasthana	CK	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	KH	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as arishta, vikritibheda, varna, swara etc. related to rishta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist factors for assessing rishta Ref: Ch. In 1/3	CK	MK	K	L&GD,BL	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist six types of prakruti bheda. Ch In 1/5	CK	MK	K	L&GD,EDU	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enist vikritibheda (types of vikriti) in the context of rishta Ch In 1/6,7, 17-23	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain prakruta and vaikarika varna Ch In 1/8,9	CK	MK	K	L&GD,ML	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Summarize varnavishayak arishta (rishta related to varna) Ch In 1/9-13	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain prakruta and vaikarika swara (normal and abnormal voices) Ch In 1/14	CK	MK	K	L&GD,EDU	QZ ,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Summarize swara vishayak arishta (arishta related to voice) Ch In 1/15,24,25	CC	DK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	

CO1,CO2	Summarize the chapter Ch In 1/26	CC	NK	KH	SDL	T-OBT,VV-Viva	F&S	III	
Topic 44 Cha.In.2-Pushpitakam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the sequence	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as niyatarishta, aniyatarishta	CK	MK	K	L&GD,BS	QZ ,COM,TT-Theory,VV-Viva	F&S	III	
CO6	Outline gandhavishayak arishta (prognistic signs identified through smell) Ch In 2/7-16	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Summarize rasavishayak arishta (progostic signs related to taste) Ch In 2/17-22	CK	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter Ch In 3/23	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 45 Cha.In.3-Parimarshaneeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist Sparshagamya bhava (palpable signs) in arishta Ch In 3/4	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain Sparshavishayak Arishta lakshna (based\on palpation)) Ch In 3/5,6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter Ch In 3/7	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 46 Cha.In.4-Indriyaneekam Indriya adhyaya (Lecture :1 hours, Non lecture: 0 hours)									

CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F	III	
CO2,CO6	Explain indriya vishayaka arishta samanya niyama (general rule regarding involvement of indriya) Ch In 4/3-6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter Ch In 4/27	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 47 Cha.In.5-Purvarupeeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist jvara rupa vishayaka poorvaroopiya rishta (rishta based on purvarupa of jvara) Ch In 5/3-5	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO4	Define swapna Ch In 5/41-42	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist and explain swapna bheda (types of swapna) Ch In 5/43	CC	MK	KH	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Recite sutra Ch In 5/41-43	CK	MK	K	SDL,REC	P-REC,TT-Theory	F&S	III	
CO1,CO2	Summarise the chapter as per sutra Ch In 5/47	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 48 Cha.In.6-Katamanisharireeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita and explain basic meaning and importance of key terms in the chapter	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Outline arishta related to pureesha, mutra and swayathu Ch In 6/11-19	CC	DK	K	L&GD	TT-Theory,VV-Viva	F&S	III	

CO1,CO2	Summarise the chapter as per sutras given at the end of the chapter Ch In 6/25	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 49 Cha.In.7-Pannarupiyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chapter in the Samhita	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Explain basic meaning and importance of chaya, pratichaya and prabha	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain pratichaya vishayaka arishta. Ch In 7/4-6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain chaya vikruti arishtas. Ch In 7/4-6	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist five types chaya Ch In 7/10-13	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Enlist seven types of prabha Ch In 7/14-15	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO3,CO6	Differentiate chaya and prabha Ch In 7/16-17	CC	MK	K	L_VC	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter Ch In 7/32	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 50 Cha.In.8-Avakshiraseeyam Indriyam Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify position of the chapter in Samhita	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per sutra given at the end of the chapter	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

Topic 51 Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1	Justify position of the chapter in Samhita	CK	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2	Explain basic meaning and importance of key terms such as ashtamaharoga	CC	MK	K	L	TT-Theory,VV-Viva	F&S	III	
CO2,CO4,CO6	Enlist ashtamaharogas Ch In 9/8-9	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutra given at the end of the chapter Ch In 9/23,24	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 52 Cha.In.10-Sadyomaraneeyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify poisition of the chapter and key terms in the chapter	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Explain sadyomaraneeya arishtas Ch In 10/3-20	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per the sutras given at the end of the chapter Ch In 10/21	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	
Topic 53 Cha.In.11-Anujyotiyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Justify the position of the chpater and explain key terms such as arishta Ch In 11/29	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Define arishta Ch In 11/29	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Recite sutra Ch In 11/29	CK	MK	K	SDL	P-VIVA,TT-Theory	F&S	III	

Topic 54 Cha.In.12-Gomayachurniyam Indriya Adhyaya (Lecture :1 hours, Non lecture: 17 hours)									
CO1,CO2	Justify the posttion of the chapter and explain key terms such as mumurshu, prasasta duta and mangalika dravya	CC	MK	K	L&GD	INT,TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Summarize mumurshu lakshana Ch In 12/9-25	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO6	Outline prashasta doota lakshana and mangalika dravya Ch In 12/71-80	CK	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO2,CO4	Define arogya in the context of arishta Ch In 12/87	CC	MK	K	L&GD	TT-Theory,VV-Viva	F&S	III	
CO1,CO2	Summarise the chapter as per sutra given at the end of the chapter Ch In 12/89	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (As a part of NLH)			
S.No	**List of Topics**	**Term**	**Hours**
1	SHLOKA PATHANA- 1	1	10
2	LEARNING THROUGH VYAKHYANA-1	1	3
3	OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA	1	2
4	IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS	1	2
5	ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA	1	2
6	IDENTIFICTION OF ASHTA DOSHA IN STHOULYA	1	2
7	CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP	1	2
8	CLINICAL OBSERVATION ON SHADUPAKRAMA	1	2
9	ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS	1	2
10	OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE	1	2
11	ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS	1	3
12	SHLOKA PATHANA- 2	2	10
13	LEARNING THROUGH VYAKHYANA-2	2	3
14	CASE TAKING IN RELATION TO NIDANA PANCHAKA	2	12
15	DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA	2	2
16	PRAMANA PARIKSHA	2	2
17	IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS	2	2
18	EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH	2	2
19	SHLOKA PATHANA-3	3	10
20	LEARNING THROUGH VYAKHYANA-3	3	3
21	LEARNING THROUGH SAMBHASHA PARISHAD	3	6
22	SROTAS PROFORMA	3	2

23	LEARNING THROUGH TANTRA YUKTI	3	5
24	ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA	3	2
25	AGNI ASSESSMENT BASED ON APACHARA	3	2
26	TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS	3	3
27	ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS	3	2

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 SHLOKA PATHANA- 1									
CO1,CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	PP-Practical,VV-Viva	F&S	I	
CO1,CO2	Compile slokas selected for recitation	CK	MK	K	SDL	PP-Practical,VV-Viva	F&S	I	
Topic 2 LEARNING THROUGH VYAKHYANA-1									
CO1,CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhyana of Carakasamhita	CC	MK	KH	L&GD,DIS,TBL	PP-Practical,VV-Viva	F&S	I	
CO1,CO2	Prepare narrative summary of vyakhyana for the specified sutras	CAP	MK	KH	SDL	PP-Practical,VV-Viva	F&S	I	
CO1,CO2	Appreciate importance of Vyakhyana in learning Samhita	AFT-REC	MK	KH	D	P-VIVA	F&S	I	
Topic 3 OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA									
CO4,CO5	Identify and compile experiences of people undergoing sneha-	CAP	MK	KH	SDL,	PP-Practical	F&S	I	V-PC

	sweda				RLE				
Topic 4 IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS									
CO3,CO4,CO6,CO7	Assess Bahudoshalakshana in patients	PSY-SET	MK	SH	CBL, PT	PP-Practical,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Appreciate the role and importance of assessing bahudosha lakshana in clinical practice	AFT-REC	MK	SH	CBL, PRA	PP-Practical,VV-Viva	F&S	I	
Topic 5 ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA									
CO3,CO4,CO6,CO7	Assess diseases based on trividha-bodhya-sangraha ie. vikaraprakriti(nature of disease), samuthana (causative factors) and adhishthana (site of disease)	PSY-SET	MK	SH	CBL, PRA	PP-Practical,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Appreciate role and importance of trividhabodhyasangraha in clinical practice	AFT-REC	MK	SH	CBL, PRA	PP-Practical,VV-Viva	F&S	I	
Topic 6 IDENTIFICTION OF ASHTA DOSHA IN STHOULYA									
CO3,CO4,CO6,CO7	Assess ashtadosha of atisthoulya in subjects	PSY-SET	MK	SH	CBL, D	TT-Theory,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Maintain good communication skills with patients	AFT-RES	MK	SH	CBL, D,PRA	TT-Theory,VV-Viva	F&S	I	
Topic 7 CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP									
CO3,CO4,CO6,CO8	Identify realtionship bewteen nija and agantu in clinical conditions	PSY-SET	MK	SH	CBL, PT,D	PP-Practical,VV-Viva	F&S	I	
CO4,CO8	Develop good rapport with patients	AFT-VAL	MK	SH	CBL, PT,D	P-VIVA,VV-Viva	F&S	I	

Topic 8 CLINICAL OBSERVATION ON SHADUPAKRAMA									
CO3,CO4,CO5,CO8	Identify shadupakrama in treatment plans of different diseases	PSY-SET	MK	SH	CBL,PT,D	PP-Practical,VV-Viva	F&S	I	
CO5,CO8	Develop good communications skills in clinics	AFT-REC	MK	SH	CBL,PT,D	PP-Practical,VV-Viva	F&S	I	
Topic 9 ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS									
CO3,CO4,CO6,CO7	Identify raktadushti karanas in patients affected by raktadushti, especially, skin diseases	PSY-SET	MK	SH	CBL,D,PRA	PP-Practical,VV-Viva	F&S	I	
CO3,CO4,CO6,CO7	Develop good communication skills with patients	AFT-REC	MK	SH	CBL,D,PRA	PP-Practical,VV-Viva	F&S	I	
Topic 10 OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE									
CO1,CO4,CO5	Justify use of agraushadhas in common clinical conditions	PSY-MEC	MK	SH	PER	P-VIVA	F&S	I	
CO8	Develop good comunication skills	AFT-REC	MK	SH	DIS,PER	P-VIVA	F&S	I	
Topic 11 ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS									
CO3,CO4,CO6,CO7	Identify dhatu-mala-upadahtu pradoshaja vikaras in patients	PSY-SET	MK	SH	CBL,PT,D_BED	P-EXAM,VV-Viva	F&S	I	
CO3,CO4,CO8	Develop rapport with patients	AFT-REC	MK	SH	CBL,D_BED	P-VIVA,VV-Viva	F&S	I	

Topic 12 SHLOKA PATHANA- 2									
CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	P-VIVA	F&S	II	
CO2	Compile slokas selected for recitation	CK	MK	K	TBL, SDL	P-VIVA	F&S	II	
Topic 13 LEARNING THROUGH VYAKHYANA-2									
CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhyana of Carakasamhita	CAP	MK	KH	L&G D,DIS ,TBL	P-VIVA	F&S	II	
CO2	Prepare narrative summary of vyakhyana for the specified sutras	CAP	MK	KH	DIS,S DL	P-VIVA	F&S	II	
CO1,CO2	Appreciate importance of Vyakhyana in learning Samhita	AFT-REC	MK	KH	D	P-VIVA	F&S	II	
Topic 14 CASE TAKING IN RELATION TO NIDANA PANCHAKA									
CO3,CO4,CO 6,CO7	Perform case taking based on nidana-panchaka	PSY-SET	MK	SH	CBL, D_BE D	P-VIVA	F&S	II	
CO8	Develop rapport with patients	AFT-REC	MK	SH	CBL, D_BE D	T-EMI,P-VIVA	F&S	II	
CO6,CO8	Develop clinical skills based on Ayurvedic clinical methods	PSY-SET	MK	SH	CBL, D_BE	PP-Practical	F&S	III	

					D				
Topic 15 DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA									
CO4,CO6,CO8	Assess skin diseases based on Ayurvedic parameters	PSY-SET	MK	SH	CBL, D_BED	PP-Practical	F&S	II	
CO6,CO8	Develop skills based on Ayurvedic clinical methods	AFT-REC	MK	SH	D_BED	PP-Practical	F&S	II	
Topic 16 PRAMANA PARIKSHA									
CO3,CO4,CO6,CO7	Assess physiometry based on pramana-pareeksha mentioned in Ayurveda	PSY-SET	MK	SH	D	VV-Viva	F&S	II	
CO8	Appreciate importance of Ayurvedic methods of measurements	AFT-REC	MK	SH	D	VV-Viva	F&S	II	
Topic 17 IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS									
CO2,CO3,CO4,CO6,CO7	Apply the conccept of "vikaravisatabhavabhavapractivisesha" in understanding diseases	CAP	MK	KH	CBL, CD	P-VIVA	F&S	II	
CO6	Perform case taking based on the concept of vikaravighata bhava abhava	PSY-SET	MK	SH	CD,D	P-VIVA	F&S	II	
Topic 18 EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH									
CO4,CO7,CO8	Apply lokapurusha-samya-sidhanta in contemporary life	CAP	MK	KH	DIS,BS,PrBL	VV-Viva	F&S	II	
Topic 19 SHLOKA PATHANA-3									
CO1,CO2	Recite the selected slokas in each chapter	CK	MK	K	REC	VV-Viva	F&S	III	

CO1,CO2	Compile slokas selected for recitation	CK	MK	K	SDL	VV-Viva	F&S	III	
Topic 20 LEARNING THROUGH VYAKHYANA-3									
CO1,CO2	Interpret selected sutras with the help of Ayurveda Deepika Vyakhyana of Carakasamhita	CAP	MK	KH	L,LS	VV-Viva	F&S	III	
CO1,CO2	Prepare narrative summary of vyakhyana for the specified sutras	CC	MK	KH	SDL	VV-Viva	F&S	III	
CO1,CO2	Appreciate importance of Vyakhyana in learning Samhita	AFT-REC	MK	KH	D	P-VIVA	F&S	III	
Topic 21 LEARNING THROUGH SAMBHASHA PARISHAD									
CO1,CO2	Demonstrate Sambhasha parishat to discuss different topics	PSY-ADT	MK	SH	D	P-VIVA	F&S	III	
CO8	Appreciate the importance of collective thinking in learning Ayurveda	AFT-VAL	MK	SH	DIS,D	P-VIVA	F&S	III	
Topic 22 SROTAS PROFORMA									
CO4,CO6,CO8	Assess involvement of srotas in clinical conditions	PSY-SET	MK	SH	D_BED	VV-Viva	F&S	III	
CO8	Develop clinical skills based on Ayurvedic clinical methods	AFT-REC	MK	SH	D_BED	VV-Viva	F&S	III	
Topic 23 LEARNING THROUGH TANTRA YUKTI									
CO1,CO2,CO4	Apply tantrayukti and interpret the sutras	CAP	MK	KH	TBL,D	P-VIVA	F&S	III	
CO1	Appreciate the importance of Tantrayukti in interpreting Samhita	CAP	MK	KH	DIS,TBL	P-VIVA,VV-Viva	F&S	III	

Topic 24 ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA									
CO3,CO4,CO6	Assess health of a person based through dhatu-samya-pareeksha	PSY-SET	MK	SH	CBL,D_BED	P-VIVA	F&S	III	
CO8	Appreciate health of a person through interaction	AFT-RES	MK	SH	D_BED	P-VIVA,VV-Viva	F&S	III	
Topic 25 AGNI ASSESSMENT BASED ON APACHARA									
CO3,CO4,CO7	Assess agni based on apachara-visesha	PSY-SET	MK	SH	DIS,D_BED	P-VIVA	F&S	III	
CO8	Develop good rapport with patients	AFT-REC	MK	SH	CBL,D_BED	P-VIVA	F&S	III	
Topic 26 TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS									
CO4,CO6,CO7	Demonstrate trividha roga visesha vijnana in clinical methods	PSY-SET	MK	SH	DIS,CBL,D	P-VIVA	F&S	III	
CO8	Appreciate the importance of Ayurvedic parameters in clinical methods	AFT-VAL	DK	SH	DIS,CBL,D	P-VIVA	F&S	III	
Topic 27 ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS									
CO3,CO5,CO6	Identify upasaya-anupasaya in patients	PSY-SET	MK	SH	CBL,D_BED	P-VIVA	F&S	III	
CO8	Appreciate wellness of patients	AFT-REC	DK	SH	D_BED	P-VIVA	F&S	III	

Table 4a: List of Practical (As a part of NHL)

S.No	Name of practical	Term	Activity	Practical hrs
1	SHLOKA PATHANA- 1	1	**Purpose:** To by heart sutras selected from Charakasamhita **Teacher's role:** Teachers should instruct the students to by heart the slokas when the respective portions are over. A log book may be kept by the teacher to mark the date and signature to note the satisfactory recitation of the slokas by the students. The performance of students can be considered for formative assessment. During summative assessment, sloka recitation will be a part of practical examination. **Students role:** To by heart the selected slokas given below and to compile minimum 100 sutras (three terms) **Sutras suggested:** 1. Cha.Su.13- Sneha Adhyaya- 13-17, 22, 57-59 2. Cha.Su.14- Sveda Adhyaya- 4,5,39,40,64 3. Cha.Su.15- Upakalpaneeya Adhyaya – 22 4. Cha.Su.16- Chikitsaprabhritiya Adhyaya - 13-21,27,28,34-36 5. Cha.Su.17- Kiyantashiraseeya Adhyaya- 12, 41-44, 62, 112-118 6. Cha.Su.18-Trisotheeya Adhyaya- 42-43, 44-47 7. Cha.Su.19-Ashtodareeya Adhyaya- 5,6 8. Cha.Su.20- Maharoga adhyaya- 3, 4, 5, 11,14, 17, 20-22 9. Cha.Su.21- Ashtauninditeeya adhyaya- 3,4,16, 18, 19, 35, 50, 58 10. Cha.Su.22- Langhanabrimhaneeya Adhyaya- 9-24 11. Cha.Su.23- Santarpaneeya Adhyaya- 5-7, 26-29 12. Cha.Su.24- Vidhisoniteeya Adhyaya- 14,18,20,21,22,24 13. Cha.Su.25- Yajjapurusheeya Adhyaya- 29,,31,33,45,46,47,50 14. Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya- 13,36,37,61,62,66,81,85,86 15. Cha.Su.27- Annapaanvidhi Adhyaya- 351-352 16. Cha.Su.28- Vividhaasheetapeetiya Adhyaya- 9-19,35-39, 45	10

2	LEARNING THROUGH VYAKHYANA-1	1	**Purpose:** To familiarize and expose the students to the relevant vyakhyana of Charaka Samhita. The following specific portions in the Vyakhyana are selected for this purpose. 1. Cha.Su.20- Maharoga adhyaya - 11,16,19 2. Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya - 13,29 3. Cha.Su.28- Vividhaasheetapeetiya Adhyaya - 7 **Teacher's role:** Teachers will teach those sutras along with the commentary and explain the importance of vyakhyana in better understanding of sutras. **Students' role:** Students will prepare a narrative summary of all the proposed vyakhyanas to highlight their importance in interpreting the sutras. During viva students are asked to interpret the respective sutras along with its vyakhyana.	3
3	OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA	1	**Purpose:** To familiarize commonly available snehayogas and commonly undertaken swedaprayogas. (Ref: Ch Su 13,14) **Teacher's role:** Make five or six groups and instruct them to enlist available ghruta and taila yoga in hospital pharmacy. Enlist the types of swedana followed in panchakarma theatre in the hospital. **Student's role:** Student in groups should document the assigned work in a prescribed format and present to all in the class.	2
4	IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS	1	**Purpose:** To assess bahudosha lakshana with the help of proforma in patients posted in hospital wards. (Ref: Ch Su 16/13-16) **Teacher's role:** Teacher should introduce the proforma in the class and guide the students how to furnish the proforma. Teacher may identify patients exhibiting bahudosha lakshana from the ward, those who are posted for Shodhana. Collect the	2

			proformas duly filled by students and analyze the data and discuss with students. **Students' role:** Student should interact with given patient and identify the Bahudosha lakshanas available in the patient and document in the proforma (minimum three cases).	
5	ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA	1	**Purpose:** To orient students on the use of trividha-bodhya-sangraha (i.e, vikaraprakriti, adhishtana, samuthana) in understanding diseases and thereby enabling them using the unique assessment protocol mentioned in Caraka samhita. (Ref: Ch Su 18/44-47 along with Chakrapani commentary) **Teacher's role:** Introduce the concept of trividha bodhya sangraha, Introduce the case proforma in the class, demonstrate case taking based on trividha-bodhya-sangraha **Students role:** Fill up the observations in the proforma during their routine clinical posting (minimum 3 cases).	2
6	IDENTIFICTION OF ASHTA DOSHA IN STHOULYA	1	**Purpose:** To identify prevalence of ashtadosha of sthaulya in individuals (Ref: Ch Su 21/4) **Teacher's role:** Explain ashtadosha in the class; Introduce the questionnaire to document ashtadosha in individuals; Demonstrate the questionnaire in obese individuals **Students role:** Students will furnish the questionnaire among five people of different age groups and prepare a report based on the findings of the questionnaire survey.	2
7	CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP	1	**Purpose:** To explore relationship between nija and agantu diseases (Ref: Ch Su 19/7) **Teacher's role:** Teacher explains nija-agantu relationship with examples in the class; Demonstrate some cases where disease starts as agantu and advance to nija and vice versa. **Students' role:** Observe minimum three	2

			cases in OP/IP and make reports to establish the relationship between nija and agantu.	
8	CLINICAL OBSERVATION ON SHADUPAKRAMA	1	**Purpose:** To explore application of shadupakrama in therapeutics (Ref Ch Su 22) **Teacher's role:** After teaching shadupakrama, teachers shall identify some cases in the hospital to demonstrate any one or more upakramas; Try to include cases with varieties of upakrama; Train students to see patients, explore the case sheets and hospital records to find out upakramas adopted to a particular patient. **Students' role:** Observe minimum three cases from hospital and go through case sheets to identify types of upakrama adopte; Interact with interns, teachers to map the upakramas adopted in each patient; Make reports on type of upakrama, nature of medicines used and effects of upakramas based on the above observations; Document observations in three cases	2
9	ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS	1	**Purpose:** To identify raktadushtikaranas in cases where raktadushti is suspected (Ref: Ch Su 24/5-10) **Teacher's role:** Teach raktadushti karana; Select some cases where raktadushti is suspected; Demonstrate presence of raktadushti karanas in one or two cases; Assign cases to students to identify presence of raktadushtikarana **Student's role:** Identify presence of raktadushti karanas in three cases with the help of questionnaire provided; Document the observations	2
10	OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE	1	**Purpose:** To justify the importance of agryoushadha in clinical practice (Ref: Ch Su 25/38-40) **Teacher's role:** Identify some important agryoushadhas from the list given in Annapanachatushka; Divide the whole class into five or six groups and assign	2

			each group with two or three agrya aushadhas **Students role:** Make monographs of agryoushadha; Interact with practitioners and collect details of use of these aushadhas in routine practice; Document the observations in the record book.	
11	ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS	1	**Purpose:** To identify dhatu-upadhatu-mala pradoshaja vikaras in selected cases. (Ref Ch Su 27/9-22) **Teacher's role:** Demonstrate the proforma in a few cases. **Students' role:** Make five case sheets reporting the findings of the assessment.	3
12	SHLOKA PATHANA- 2	2	See Practical.1 for instructions **Sutras suggested:** 1. Cha.Su.30-Arthedashamahamooleeyam Adhyaya - 3,4,10,11,12 2. Cha.Ni.01-Jwara nidana Adhyaya-3,5,7,8,9,10,11,38-40 3. Cha.Ni.02-Raktapitta nidana Adhyaya- 19,27 4. Cha.Ni.04-Prameha nidana adhyaya-3, 4, 48-49 5. Cha.Ni.05- Kushta nidana Adhyaya-3,4,5,8 6. Cha.Ni.06-Shosha nidana Adhyaya-3, 5,7,9,11,14 7. Cha.Ni.07- Unmada nidana Adhyaya-5,19-22 8. Cha.Ni.08- Apasmara nidana adhyaya- 3,5,17-22, 33-35,37-39 9. Cha.Sha.1-Katithapurusheeya Adhyaya- 16-23, 28-30,36, 63, 64,70-74, 98,102,109,137-139, 148,149 10. Cha.Sha.02-Atulyagothreeyam Adhyaaya- 26, 27, 35,44,45-47 11. Cha.Sha.03-Khuddika garbhavakranti Adhyaya- 17 12. Cha.Sha.04-Mahatee garbhavakranti Adhyaya- 6,36 13. Cha.Sha.05-Purushavichaya Shareera Adhyaya- 3, 5, 8,16	10

			14. Cha.Sha.06-Sareeravichaya adhyaya-4, 5-11, 12,13, 17, 28, 30 15. Cha.Sha.07- Sareerasankhya sareera Adhyaya	
13	LEARNING THROUGH VYAKHYANA-2	2	See Practical No.2 for instructions **Suggested sutras:** 1. Cha.Ni. 4-Prameha nidana adhyaya -4 2. Cha.Sha.1-Katithapurusheeya Adhyaya-21 3. Cha.Sha. 6- Sareeravichaya adhyaya -9-11	3
14	CASE TAKING IN RELATION TO NIDANA PANCHAKA	2	**Purpose:** To map the disease process through nidana-panchaka (Ref: Ch Ni 1) **Teacher's role:** Demonstrate the case proforma in patients; Assign five patients to students for documenting nidanapanchaka **Students role:** Furnish the case proforma in five patients	12
15	DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ONKUSHTA	2	**Purpose:** To familiarize differential diagnosis of kushta through Ayurvedic parameters (Ref: Ch Ni 5) **Teacher's role:** Demonstrate case taking in a few cases **Students role:** Furnish the case proforma for minimum three cases of skin diseases	2
16	PRAMANA PARIKSHA	2	**Purpose:** To familiarize Ayurvedic methods of physiometry (Ref: Ch Sha 7) **Teacher's role:** Preparing measurement methods based on anguleeprmana and anjaleepramana as explained in Ayurveda; Demonstrating such methods in healthy individuals **Students role:** Assessing physiometry based on the guidelines given by the treacher in three individuals/peers and document the observations	2
17	IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS	2	**Purpose:** To explore concept of vikara-vighata-bhava-abhava in clinical scenario. (Ref: Ch Ni 4/3 along with Chakrapani commentary)	2

			Teachers role: Divide class into four or five groups and assign most commonly seen diseases to each group (Eg. Prameha); Conduct group discussions to identify risk factors / protective factors of respective diseases through literature review, interaction with peers and teachers; Sum up findings of group discussions and prepare check list for each disease **Student's role:** Conduct group discussions to identify risk/protective factors of disease assigned to them; Prepare check list for each disease regarding probable risk/protective factors; Identify presence/absence of items in the check list in minimum of three cases of the respective disease	
18	EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH	2	**Purpose:** To explore loka-purusha-samya in the background of one health movement (Ref: Ch Sha 5) **Teacher's role:** Conduct discussions in the class to identify how nature is related to human being; Explore this relationship in the background of concept of one health; conduct discussions **Students role:** Conduct the discussions and prepare a summary report	2
19	SHLOKA PATHANA-3	3	Refer Practical No.1 for instructions **Sutras suggested:** 1. Cha.Vi. 01- Rasa vimaana Adhyayam-10,24 2. Cha.Vi. 02-Trividha kuksheeya Adhyayam-15-18 3. Cha.Vi. 04-Trividha roga vishesha vijnyaneeya adhyaya-4,12 4. Cha.Vi. 05- Sroto vimana Adhyaya-3,4,7,9-27 5. Cha.Vi. 06-Roganika vimana adhyaya -19 6. Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya-28 7. Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam-3,6,68-78 8. Cha.In.5-Purvarupeeyam Indriyam Adhyaya-43 9. Cha.In.11-Anujyotiyam Indriya	10

			Adhyaya-29	
20	LEARNING THROUGH VYAKHYANA-3	3	Refer Practical No.2 for instructions **Sutras suggested:** 1. Cha.Vi.01- Rasa vimaana Adhyayam -10 2. Cha.Vi.08- Rogabhishagjiteeyam Adhyaayam-68 -80	3
21	LEARNING THROUGH SAMBHASHA PARISHAD	3	**Purpose:** To familiarize the method of Sambhasha parishad in bringing out scientific discussions. (Ref: Ch Vi 8) **Teacher's role:** Prepare guidelines for conducting Sambhasha parishat as per descriptions in Vadamarga; Demonstrate parishat in the class either through a video demonstration or otherwise; Divide the class into four or five groups and assign one topic each for them; Evaluate the group presentations based on the guidelines **Student's role:** Each group will prepare and demonstrate a parishat in the subject concerned; Prepare summary of the parishat **Suggested topics:** 1. Relevance of Daivavyapasraya cikitsa 2. Rakta as fourth dosha 3. Relevance of food classification 4. Specific agrya related to vihara (Eg: vishado rogavardhananam) 5. Importance of naming of disease 6. Relevance of viruddha ahara	6
22	SROTAS PROFORMA	3	**Purpose:** To assess status of srotodushti in different clinical conditions (Ref: Ch Vi 5) **Teacher's role:** Demonstrate the proforma for assessment of srotas in clinical conditions **Students role:** Furnish the srotas proforma in at least three cases	2
23	LEARNING THROUGH TANTRA YUKTI	3	**Purpose:** Demonstrate use of tantrayukti in different sutras **Teachers role:** Identify and demonstrate application of tanrayukti in different sutras	5

			Student's role: Identify tantrayukti and prepare summary on justifying importance of tantrayukti in selected sutras **Suggested Tantrayuktis**: 1. Adhikaran - commonly seen in many sutras 2. Yoga - commonly seen in many sutras 3. Padartha - commonly seen in many sutras 4. Vakyasesha - commonly seen in many sutras 5. Upadesha - Ca. Su. 13/18-19, Ca. Su. 13/94 6. Niyoga - Ca. Su. 13/34, Ca. Ni. 3/17 7. Apadesha - Ca. Su. 13/13, Ca. Su. 18/44-46, Ca. Su. 26/41, Ca. Ni. 2/12-17 8. Samuchaya - Ca. Su. 13/23-25, Ca. Su. 20/8, Ca. Su. 23/5-7, Ca. Su. 23/27-30, Ca. Ni. 3/7 9. Nidarshana - Ca. Su. 13/96-97, Ca. Su. 17/75(1), Ca. Su. 14/5, Ca. Su. 19/5, Ca. Su. 30/5 10. Nirvachana - Ca. Su. 16/31-32, Ca. Su. 16/34, Ca.Su. 17/95, Ca. Su. 21/9, Ca. Su. 25/4, 11. Ca. Su. 29/4, Ca. Su. 30/5, Ca. Su. 30/12, Ca. Su. 30/24 12. Vidhana - Ca. Su. 15/11, Ca. Su. 15/16, Ca. Su. 16/27 13. Prasanga - Ca. Su. 17/113, Ca. Su. 20/8, Ca. Su. 25/4, Ca. Ni. 1/3, Ca. Sa. 1/118-126 14. Viparyaya - Ca. Su. 25/31, Ca. Sa. 6/6, Ca. Sa. 6/9, Ca. Ni. 3/7, Ca. Ni. 3/9, Ca. Ni. 3/11 15. Ekantika - Ca. Su 15/5, Ca. Su. 20/22, Ca. Su. 21/20, Ca. Su. 25/31, Ca. Su. 30/25, Ca. Ni. 1/32 16. Atitaveksha - Ca. Su. 22/31, Ca. Su. 28/25-30 17. Anagataveksha - Ca. Su. 15/5, Ca. Su. 28/30, Ca. Vi. 8/93, Ca. Vi. 8/135, Ca. Vi. 8/136 18. Swasangya - Ca. Su. 30/3 19. Prayojana - Ca. Su. 30/26, Ca. Sa. 5/5 20. Anumata - Ca. Su. 26/64-65, Ca. Su. 16/28, Ca. Sa. 1/16 21. Vikalpa - Ca. Su. 26/105 22. Pradesha - Ca. Su. 27/329, Ca. Vi. 8/137	

			23. Sambhava - Ca. Su. 28/45 24. Hetwartha - Ca. Ni. 2/21, Ca. Ni. 4/4, Ca. Ni. 7/28, Ca. Vi. 3/40 25. Atidesha - Ca. Sa. 6/11 26. Apavarga - Ca. Su. 26/106 27. Uddhara - Ca. Su. 25/29 28. Anaikantika - Ca. Su. 15/4 29. Pratyutsara and Uddhara - Ca. Su. 25/10-28 30. Nirnaya - Ca. Su. 25/29 31. Apavarga - Ca. Vi. 1/10	
24	ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA	3	**Purpose:** To assess health status of a person based on dhatusamya pareeksha. (Ref: Ch Vi 8/89) **Teacher's role:** Demonstrate use of proforma in healthy subjects **Students role:** Assess dhatusamya in ten individuals using the proforma	2
25	AGNI ASSESSMENT BASED ON APACHARA	3	**Purpose:** To familiarise the assessment of agni based on apacara-visesha (Ref: Ch Vi 6/12) **Teacher's role:** Explain the concept of agnipareeksha based on apacharavisesha; Demonstrate the questionnaire in a few subjects **Students role:** Assess agni of ten individuals using the proforma	2
26	TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS	3	**Purpose:** To justify the role of trividha-rogavisesha vijnana (pratyaksha, anumana and aptopadesa) in clinical methods. (Ref: Ch Vi 4) **Teacher's role:** Demonstrate the use of pratyaksha, anumana and aptopadesa in case taking, stressing on use of sense organs (smell, touch, vision and sound), methods of inference and importance of aptopadesa (writing respective references relevant in a particular case); Assigning cases to demonstrate the above methods **Students role:** Prepare reports on application of trividha visesha vijnana in three cases	3

27	ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS	3	**Purpose:** To justify importance of upasaya and anupasaya clinical examination (Ref: Ch Ni 1 with Chakrapani commentary) **Teacher's role:** Demonstrate identification of upasaya and anupasaya in selected cases **Students role:** Identify upasaya and anupasaya in a minimum of three cases and document it	2
			Total Hr	**100**

Activity

CO	Topic name	Activity Details	Hours #
CO5,CO7	Cha.Su.15-Upakalpaneeya Adhyaya	**Expert Lecture on Aturalaya:** This activity will evoke an interest among students about planning for construction of Hospitals and Nursing homes. Topic: Standard guidelines to setup Ayurveda Clinics, Nursing Homes and Hospitals.	1
CO6,CO7,CO8	Cha.Su.19-Ashtodareeya Adhyaya	**Activity on Disease classification:** Teacher should give an insight to NAMASTE portal published by Ministry of AYUSH. Students should go through with every standardised Ayurveda terminologies related to disease classification and also National Ayurveda Morbidity codes.	2
CO4,CO6,CO8	Cha.Su.20- Maharoga adhyaya	**Compilation/ Making monograph on Nanatmaja vikara:** Steps (1) Teacher should make teams of 3-5 students.(2) An Editorial team for making monograph has to be made including experts of Roga Nidana. (3) Divide the 140 diseases into available number of teams. (4) Teacher should provide a format to collect data on each diseases which must include pictorial representation of disease and cross references. (5) The Editorial team will collect the data from all teams and edit in the form of a	3

		book. (6) The content should be reviewed by Experts and made as E-Monograph (PDF)/ Book.	
CO4,CO7	Cha.Su.21- Ashtauninditeeya adhyaya	**Video making on concept of Nidra:** Steps (1) Teacher should explain the content on which students should make video (2) The Minimum duration of Video should be 3 minutes. (3) Video can be in regional languages. (4) Teacher should select the best videos and can publish in social media after rectifying the content of the video.	1
CO4,CO5,CO7	Cha.Su.25- Yajjapurusheeya Adhyaya	**Justifying concept of Hita and Ahita ahara:** Steps (1) Students should be divided in to groups and assign some of the Hita and Ahita ahara dravya (2) Student should find and discuss the logical explanations on justifying the given dravya as Hita or Ahita	2
CO4,CO5,CO7	Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya	**Application of paradi guna:** Steps (1) Any probable drug or treatment plan to be selected and assign to various groups (2) Students should view them through paradi guna and document it.	2
CO5,CO8	Cha.Su.27- Annapaanvidhi Adhyaya	**Collection of different dravya's:** Steps (1) Student should collect different dravya's available in their locality. (2) Student should exhibit the same and discuss with experts. (3) Document opinion given by experts.	2
CO4,CO8	Cha.Su.29- Dashapraanaayataneeya Adhyaya	**Skit on different types of vaidya in relation to medical ethics:** Steps (1) The class has to be divided into teams and they should be assigned to write a story for skit, considering different qualities of vaidya (2) They should perform the skit after Screening done by concerned teachers	2
CO4,CO6	Cha.Ni. 08- Apasmara nidana adhyaya	**Documentation of Nidanarthakara roga:** Student should discuss and document the experiences of practising physicians of their	2

		Hospital or outside about Nidanarthakara roga.	
CO3,CO4,CO6,CO7	Cha.Ni. 08- Apasmara nidana adhyaya	**Quiz on Nidana sthana:** Steps (1) Teacher should give a written test including important multiple choice questions of nidana sthana. (2) The highest scoring students should be selected and made into different teams as per the convenience. (3) The selected students should be conducted quiz with different rounds considering the content of the Nidana sthana.	2
CO3,CO4,CO7	Cha.Sha.1-Katithapurusheeya Adhyaya.	**Game on Ashta smruti karana:** Steps (1) Plan the Memory check games by using Different materials such as Drugs, Books and instruments.(2) Students should be subjected for memory check sessions. (3) Later their experiences should be interpreted through Ashta smruti karana.	2
CO4,CO6,CO7	Cha.Sha. 04- Mahatee garbhavakranti Adhyaya	**Identify film/Tv serial characters having different qualities of Trividha satwa and their varieties:** Steps (1) Students has to be divided into teams and each team should be assigned some of the satwa. (2) The team should collect the video clips of those characters and has to present to all after getting scrutinized by teachers.	2
CO4,CO8	Cha.Sha. 05- Purushavichaya Adhyaya	**Adopting pravrutti and nivrutti upayas in present era:** Steps (1) Teacher should make teams and assign different pravrutti and nivrutti upayas.(2) Team should present the pravrutti and nivrutti upayas considering relevance in present era.	2
CO4,CO7,CO8	Cha.Sha. 06- Sareeravichaya adhyaya	**Analysing Data on causes of akala mrutyu:** Students should search and collect data from online sources published by Govt or Private Authorities about the causes of Akala mrutyu. Analyse and present the data and discuss on Akala mrutyu in the class.	2

CO4,CO7	Cha.Sha.08- Jathisutreeya Adhyaya	**Street play on awareness of garbhopaghatakara bhava:** Steps (1) Teacher should make teams and explain about the structure of street play (2) Student should create a narrative story to present the concept in public (3) Minimum duration of the play is 15 minutes	2
CO7,CO8	Cha.Vi.01- Rasa vimaana Adhyayam	**Digital Posters for public awareness on Ahara vidhi:** Steps (1) Teacher should assign the topic to the students individually or in group. (2) Student should make a digital posters or infographics with the help of various online tools such as CANVA etc.	2
CO4,CO7,CO8	Cha.Vi. 03-Janapadodwansaneeya Vimanam Adhyaya	**Short Documentary on any of the Janapadodhwamsakara bhava:** Steps (1) Teacher should guide the students on Janapadodhwamsakara bhava (2) Students should be taught on what is documentaries and should fix the duration of video. (3) Teams should be made and they have to shoot and edit the videos on any of the janapadodhwamsakara bhava. (4) Present the documentaries and share experience.	2
CO4,CO8	Cha.Vi. 8-Rogabhishagjiteeyam Adhyaayam.	**Identifying Adhyayana vidhi:** Steps (1) Teacher should guide the students to identify and document different individual and group learning techniques. (2) Students should present and share experience on their learning techniques	2
CO3,CO4,CO7	Cha.In.5-Purvarupeeyam Indriyam Adhyaya	**Identifying types of swapna:** Steps (1) Teacher should assist to make a Proforma for different types of Swapna. (2) Student should assess the proforma with Healthy individuals or diseased and analyse the Data.	2
CO3,CO4,CO7,CO8	Cha.In.12-Gomayachurniyam Indriya Adhyaya	**Discussion on death signs:** Steps (1) Teacher should assign set of students to interact with	1

		concerned ICU Doctors/ Nurses or assistants. (2) Students should interact with them based on arishta lakshanas and document it.	
CO3,CO6,CO7	Cha.In.01-Varnaswareeya Adhyaya	**Use of various standard tools for assessing factors related to arishta :** Students are assigned with some of the standard tools to assess various fators relevant in arishta-vijnana availale in the following source: https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php?title=Varnasvariyam_Indriyam_Adhyaya#Assessment_of_complexion	2

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	30
2	Lecture with Power point presentation	17
3	Lecture & Group Discussion	364
4	Lecture with Video clips	20
5	Discussions	37
6	Brainstorming	58
7	Inquiry-Based Learning	14
8	PBL	6
9	CBL	48
10	Project-Based Learning	5
11	TBL	1
12	Team project work	2
13	Flipped classroom	29
14	Blended Learning	9
15	Edutainment	9
16	Mobile learning	7

17	Role plays	15
18	Self-directed learning	105
19	Problem solving method	2
20	Workshops	2
21	Game-Based Learning	4
22	Demo on Model	1
23	Library Session	4
24	Peer learning	6
25	Real life experience	4
26	Recitation	40
27	Presentations	3
28	Case diagnosis	1
29	Drug analysis	4
30	Demonstration	9
31	Demonstration bedside	4
32	Field visit	3

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SA2	1	100	-	75	10 (Set SB)	15	100	200

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Ass essment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-SA2
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper 1						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**Cha.Su.13- Sneha Adhyaya**	1	37	Yes	Yes	Yes
2	**Cha.Su.14- Sveda Adhyaya**	1		Yes	Yes	Yes
3	**Cha.Su.15- Upakalpaneeya Adhyaya**	1		Yes	Yes	Yes
4	**Cha.Su.16- Chikitsaprabhritiya Adhyaya**	1		Yes	Yes	Yes
5	**Cha.Su.17- Kiyantashiraseeya Adhyaya**	1		Yes	Yes	Yes
6	**Cha.Su.18-Trisotheeya Adhyaya**	1		Yes	Yes	Yes
7	**Cha.Su.19-Ashtodareeya Adhyaya**	1		Yes	Yes	No
8	**Cha.Su.20- Maharoga adhyaya**	1		Yes	Yes	No
9	**Cha.Su.21- Ashtauninditeeya adhyaya**	1		Yes	Yes	Yes
10	**Cha.Su.22- Langhanabrimhaneeya Adhyaya**	1		Yes	Yes	Yes
11	**Cha.Su.23- Santarpaneeya Adhyaya**	1		Yes	Yes	Yes
12	**Cha.Su.24- Vidhishoniteeya Adhyaya**	1		Yes	Yes	Yes
13	**Cha.Su.25- Yajjapurusheeya Adhyaya**	1		Yes	Yes	Yes
14	**Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya**	1		Yes	Yes	Yes
15	**Cha.Su.27- Annapaana vidhi Adhyaya**	1		Yes	Yes	No
16	**Cha.Su.28- Vividhashitapeeteeya Adhyaya**	1		Yes	Yes	Yes

17	**Cha.Su.29- Dashapraanaayataneeya Adhyaya**	2		Yes	Yes	No
18	**Cha.Su.30- Arthedashamahamooleeya Adhyaya**	2		Yes	Yes	Yes
19	**Cha.Ni.01-Jwara nidana Adhyaya**	2	19	Yes	Yes	Yes
20	**Cha.Ni.02-Raktapitta nidana Adhyaya**	2		Yes	Yes	Yes
21	**Cha.Ni.03-Gulma nidana Adhyaya**	2		Yes	Yes	No
22	**Cha.Ni.04-Prameha nidana adhyaya**	2		Yes	Yes	Yes
23	**Cha.Ni.05-Kushta nidana Adhyaya**	2		Yes	Yes	Yes
24	**Cha.Ni.06-Shosha nidana Adhyaya**	2		Yes	Yes	Yes
25	**Cha.Ni.07-Unmada nidana Adhyaya**	2		Yes	Yes	Yes
26	**Cha.Ni.08-Apasmara nidana adhyaya**	2		Yes	Yes	Yes
27	**Cha.Vi.01- Rasa vimana Adhyayam**	3	24	Yes	Yes	Yes
28	**Cha.Vi.02-Trividha kuksheeya Adhyayam**	3		Yes	Yes	Yes
29	**Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya**	3		Yes	Yes	Yes
30	**Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya**	3		Yes	Yes	Yes
31	**Cha.Vi. 05- Sroto vimana Adhyaya**	3		Yes	Yes	Yes
32	**Cha.Vi. 06-Roganika vimana adhyaya**	3		Yes	Yes	Yes
33	**Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya**	3		Yes	Yes	Yes

34	**Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam.**	3		Yes	Yes	Yes
35	**Cha.Sha.01-Katithapurusheeya Adhyaya**	2	13	Yes	Yes	No
36	**Cha.Sha.02-Atulyagothreeyam Adhyaaya**	2		Yes	Yes	No
37	**Cha.Sha.03-Khuddika garbhavakranti Adhyaya**	2		Yes	Yes	No
38	**Cha.Sha.04-Mahatee garbhavakranti Adhyaya**	2		Yes	Yes	Yes
39	**Cha.Sha.05-Purushavichaya Shareera Adhyaya**	2		Yes	Yes	No
40	**Cha.Sha.06-Sareeravichaya adhyaya**	2		Yes	Yes	No
41	**Cha.Sha.07- Sareerasankhya sareera Adhyaya**	2		Yes	Yes	No
42	**Cha.Sha.08-Jathisutreeya Adhyaya**	2		Yes	Yes	No
43	**Cha.In.1-Varnasvariyam Indriya Adhyaya**	3	7	Yes	Yes	No
44	**Cha.In.2-Pushpitakam Indriya Adhyaya**	3		Yes	No	No
45	**Cha.In.3-Parimarshaneeyam Indriyam Adhyaya**	3		Yes	No	No
46	**Cha.In.4-Indriyaneekam Indriya adhyaya**	3		Yes	No	No
47	**Cha.In.5-Purvarupeeyam Indriyam Adhyaya**	3		Yes	Yes	No
48	**Cha.In.6-Katamanisharireeyam Indriyam Adhyaya**	3		Yes	No	No
49	**Cha.In.7-Pannarupiyam Indriyam Adhyaya**	3		Yes	Yes	No
50	**Cha.In.8-Avakshiraseeyam Indriyam**	3		Yes	No	No

	Adhyaya					
51	**Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya**	3		Yes	No	No
52	**Cha.In.10-Sadyomaraneeyam Indriya Adhyaya**	3		Yes	Yes	No
53	**Cha.In.11-Anujyotiyam Indriya Adhyaya**	3		Yes	Yes	No
54	**Cha.In.12-Gomayachurniyam Indriya Adhyaya**	3		Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Cha.Su.13- Sneha Adhyaya / Cha.Su.14- Sveda Adhyaya **2.** Cha.Su.17- Kiyantashiraseeya Adhyaya / Cha.Su.15- Upakalpaneeya Adhyaya **3.** Cha.Su.20- Maharoga adhyaya / Cha.Su.18-Trisotheeya Adhyaya / Cha.Su.19-Ashtodareeya Adhyaya **4.** Cha.Su.22- Langhanabrimhaneeya Adhyaya / Cha.Su.21- Ashtauninditeeya adhyaya **5.** Cha.Su.23- Santarpaneeya Adhyaya / Cha.Su.24- Vidhishoniteeya Adhyaya **6.** Cha.Su.28- Vividhashitapeeteeya Adhyaya / Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya / Cha.Su.25- Yajjapurusheeya Adhyaya **7.** Cha.Su.30- Arthedashamahamooleeya Adhyaya / Cha.Su.29- Dashapraanaayataneeya Adhyaya **8.** Cha.Ni.02-Raktapitta nidana Adhyaya / Cha.Ni.01-Jwara nidana Adhyaya **9.** Cha.Ni.04-Prameha nidana adhyaya / Cha.Ni.03-Gulma nidana Adhyaya **10.** Cha.Ni.05-Kushta nidana Adhyaya / Cha.Ni.06-Shosha nidana Adhyaya **11.** Cha.Ni.08-Apasmara nidana adhyaya / Cha.Ni.07-Unmada nidana Adhyaya **12.** Cha.Vi.02-Trividha kuksheeya Adhyayam / Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya / Cha.Vi.01- Rasa vimana Adhyayam **13.** Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya / Cha.Vi. 05- Sroto vimana Adhyaya **14.** Cha.Vi. 06-Roganika vimana adhyaya / Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya **15.** Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. **16.** Cha.Sha.02-Atulyagothreeyam Adhyaaya / Cha.Sha.01-Katithapurusheeya Adhyaya **17.** Cha.Sha.04-Mahatee garbhavakranti Adhyaya / Cha.Sha.03-Khuddika garbhavakranti Adhyaya / Cha.Sha.05-Purushavichaya Shareera Adhyaya **18.** Cha.Sha.07- Sareerasankhya sareera Adhyaya

		/ Cha.Sha.06-Sareeravichaya adhyaya / Cha.Sha.08-Jathisutreeya Adhyaya **19.** Cha.In.1-Varnasvariyam Indriya Adhyaya / Cha.In.2-Pushpitakam Indriya Adhyaya / Cha.In.4-Indriyaneekam Indriya adhyaya / Cha.In.5-Purvarupeeyam Indriyam Adhyaya **20.** Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya / Cha.In.11-Anujyotiyam Indriya Adhyaya / Cha.In.8-Avakshiraseeyam Indriyam Adhyaya / Cha.In.12-Gomayachurniyam Indriya Adhyaya
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Cha.Su.13- Sneha Adhyaya / Cha.Su.14-Sveda Adhyaya / Cha.Su.16-Chikitsaprabhritiya Adhyaya / Cha.Su.20-Maharoga adhyaya / Cha.Su.18-Trisotheeya Adhyaya / Cha.Su.17- Kiyantashiraseeya Adhyaya / Cha.Su.15- Upakalpaneeya Adhyaya / Cha.Su.19-Ashtodareeya Adhyaya **2.** Cha.Su.28- Vividhashitapeeteeya Adhyaya / Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya / Cha.Su.25- Yajjapurusheeya Adhyaya / Cha.Su.22- Langhanabrimhaneeya Adhyaya / Cha.Su.23- Santarpaneeya Adhyaya / Cha.Su.24- Vidhishoniteeya Adhyaya / Cha.Su.21- Ashtauninditeeya adhyaya / Cha.Su.30- Arthedashamahamooleeya Adhyaya / Cha.Su.29- Dashapraanaayataneeya Adhyaya / Cha.Su.27- Annapaana vidhi Adhyaya **3.** Cha.Ni.04-Prameha nidana adhyaya / Cha.Ni.05-Kushta nidana Adhyaya / Cha.Ni.03-Gulma nidana Adhyaya / Cha.Ni.08-Apasmara nidana adhyaya / Cha.Ni.02-Raktapitta nidana Adhyaya / Cha.Ni.06-Shosha nidana Adhyaya / Cha.Ni.01-Jwara nidana Adhyaya / Cha.Ni.07-Unmada nidana Adhyaya **4.** Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya / Cha.Vi.02-Trividha kuksheeya Adhyayam / Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya / Cha.Vi.01- Rasa vimana Adhyayam **5.** Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. / Cha.Vi. 06-Roganika vimana adhyaya / Cha.Vi. 05- Sroto vimana Adhyaya / Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya

		6. Cha.Sha.02-Atulyagothreeyam Adhyaaya / Cha.Sha.01-Katithapurusheeya Adhyaya / Cha.Sha.04-Mahatee garbhavakranti Adhyaya / Cha.Sha.03-Khuddika garbhavakranti Adhyaya **7.** Cha.Sha.07- Sareerasankhya sareera Adhyaya / Cha.Sha.06-Sareeravichaya adhyaya / Cha.Sha.08-Jathisutreeya Adhyaya / Cha.Sha.05-Purushavichaya Shareera Adhyaya **8.** Cha.In.11-Anujyotiyam Indriya Adhyaya / Cha.In.1-Varnasvariyam Indriya Adhyaya / Cha.In.7-Pannarupiyam Indriyam Adhyaya / Cha.In.10-Sadyomaraneeyam Indriya Adhyaya / Cha.In.12-Gomayachurniyam Indriya Adhyaya / Cha.In.5-Purvarupeeyam Indriyam Adhyaya
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** Cha.Su.13- Sneha Adhyaya / Cha.Su.14-Sveda Adhyaya / Cha.Su.16-Chikitsaprabhritiya Adhyaya / Cha.Su.18-Trisotheeya Adhyaya / Cha.Su.17-Kiyantashiraseeya Adhyaya / Cha.Su.15-Upakalpaneeya Adhyaya **2.** Cha.Su.28- Vividhashitapeeteeya Adhyaya / Cha.Su.26- Atreyabhadrakaapyeeya Adhyaya / Cha.Su.25- Yajjapurusheeya Adhyaya / Cha.Su.22- Langhanabrimhaneeya Adhyaya / Cha.Su.23- Santarpaneeya Adhyaya / Cha.Su.24- Vidhishoniteeya Adhyaya / Cha.Su.21- Ashtauninditeeya adhyaya / Cha.Su.30- Arthedashamahamooleeya Adhyaya **3.** Cha.Ni.04-Prameha nidana adhyaya / Cha.Ni.05-Kushta nidana Adhyaya / Cha.Ni.08-Apasmara nidana adhyaya / Cha.Ni.02-Raktapitta nidana Adhyaya / Cha.Ni.06-Shosha nidana Adhyaya / Cha.Ni.01-Jwara nidana Adhyaya / Cha.Ni.07-Unmada nidana Adhyaya **4.** Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya / Cha.Vi.02-Trividha kuksheeya Adhyayam / Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. / Cha.Vi. 06-Roganika vimana adhyaya / Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya / Cha.Vi. 05- Sroto vimana Adhyaya / Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya / Cha.Vi.01- Rasa

		vimana Adhyayam

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Viva on Practical record	10
2	Shloka recitation	10
3	Viva on vyakhyana	5
4	Viva on Sutrasthana	20
5	Viva on Nidanasthana	10
6	Viva on Vimanasthana	10
7	Viva on Shareerasthana	5
8	Viva on Indriyasthana	5
9	Electives (Set SB)	10
10	IA	15
Total Marks		**100**

References Books/ Resources

S.No	Book	Resources
1	Charakasamhita with Cakrapani Commentary	Yadavji Trikamji, editor. Agnivesha. Charaka Samhita. Ayurveda Dipika. Chakrapanidatta (comm)(Sanskrit) Varanasi: Chaukambha Sanskrit Sansthan
2	Charak Samhita (English Commentary)	Ram Karan Sharma and Bhagawan Dash, editor. Charak Samhita (English Commentary): Varanasi: Chowkambha Sanskrit Series
3	Charak Samhita (Hindi commentary)	Harishchandra Singh Kushvaha, editor and translator. Charak Samhita (Hindi Commentary): Varanasi: Chaukambha Orientalia
4	Charak Samhita (Hindi commentary)	Jayadev Vidyalankar, editor. Charak Samhita (Hindi commentary): Motilal Banarsi Dass Publishers Pvt. Ltd
5	Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar	Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar
6	Charak Samhita (Hindi commentary)	Gorakhanath Chaturvedi and Kashinath Pandeya Shastri, editor. Charak Samhita (Hindi commentary): Varanasi: Chaukhambha Bharati Academy
7	Charak Samhita (Hindi commentary)	Brahmanand Tripathi, editor. Charak Samhita (Hindi commentary):Varanasi: Chaukhamba Surbharati Prakashan
8	Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi	Vidyadhar Shukla and Ravidatta Tripathi Charak Samhita (Hindi commentary): Varanasi: Chaukhamba Sanskrit Pratishtan
9	Charaka Samhita (Hindi commentary)	Banwari Lal Gaur, editor. Charaka Samhita (Hindi commentary): Rashtriya Ayurved Vishwavidyalaya
10	Legacy of Caraka	M S Valiathan, Legacy of Caraka (English): Hyderabad: Orient Longman
11	Charakasamhita	Charak e-Samhita –National Institute of Indian Medical Heritage – http://niimh.nic.in/ebooks/ecaraka
12	Charakasamhita	Charakasamhitaonline.com - www.carakasamhitaonline.com
13	Illustrated Carakasamhita, Dr. R Vidyanath	R Vidyanath, editor. Illustrated Carakasamhita (English Commentary): Varanasi Chaukhambha Prakashak
14	Namaste Portal	NAMASTE - Portal (ayush.gov.in)
15	CCRAS Prakriti tool	CCRAS Prakriti Tool http://www.ccras.res.in/
16	Sanskrit English Dictionary	Monnier Williams. A Sanskrit English Dictionary. Delhi. Motilal Banarsidasspublishers Pvt Ltd.

17	Shabdakalpadruma	Raja Radha Kanta Deva, Shabda Kalpa Drum: Varanasi: Chowkhamba Sanskrit Series Office
18	Vaidyak Shabda Sindhu	Kaviraj Shri Nagendra Nath Sen Vaidya Shastri, Vaidyak Shabda Sindhu: Varanasi: Chowkhamba Orientalia

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Rasashastra evam Bhaishajyakalpana

(SUBJECT CODE : AyUG-RB)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-RB

Summary

Total number of Teaching hours: 450			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(NLH)-Theory		300	300(NLH)
Paper I & II	90		
Non Lecture hours(NLH)-Practical			
Paper I & II	210		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Ayurvedic physician, Pranabhisara Vaidya, makes efforts for his task of management of diseases and maintenance of health. For this role his tool is Potent medicine and tactful techniques acquired from profound knowledge of classics.

Bheshaja is important in chikitsa chatushpada. Prepared personally or purchased or prescribed, the medicines must be potent. Identity, Purity, Quality, Stability, Safety and Efficacy all factors must be assessed carefully so that extensive therapeutic utility without any adverse drug reaction can be achieved. Education of Ayurvedic Pharmaceutics i. e. Ayurvediya Aushadhi Nirmana Shastra must provide foundation through guidance for academicians, Researchers, entrepreneurs and clinicians. Yogavijyana and prayogavijnyana is that expected foundation. Ayurvedic classics expect yuktijna, siddhahasta, sarva bhaishajya kovid (carak su. 20/22) physician as an outcome of studying Ayurveda.

To achieve the programme outcome of the Professional BAMS course of NCISM , this particular subject contributes a lot by providing thorough multidimensional knowledge in cognitive domain, hands on training of pharmaceutical processing in Psychomotor domain and ethical attitudes towards drug development in affective domain.

. The thought process by which Rasa Bheshaja Yogas reaches yojana- administration is very much important. Dose, Duration, Time and Route of administration, anupana all such factors are unique features of holistic Ayurvedic Practice. Acquiring details of these topics along with practical application with understanding its significance is the course objective of the subject RS& BK. The main Goal is to cater professional Competency in Ayurvedic Pharmaceutics and make them capable to select proper / effective yoga and administer it safely.

It is the need of time to make some addition in the current teaching and learning process of Rasashastra & Bhaishajya Kalpana to make it more relevant, practical and contemporary. New teaching technology tools will certainly be helpful in the effective delivery of knowledge of Rasashastra & Bhaishajya Kalpana. As per the revised regulation, the nomenclature of the subject is Ayurvediya Aushadhi Nirmana Vigyana as paper I and Ayurvediya Aushadhi Prayoga Vigyana as paper II for Second Professional BAMS course.

In this revision, NCISM has tried its best to take Rasashastra & Bhaishajya Kalpana teaching beyond the four walls of the classroom and get it connected with present global needs. For effective content delivery create interest in the subject it becomes evident to teach Rasashastra & Bhaishajya Kalpana with practical demonstrations. In order to facilitate proficiency in pharmaceutical preparation and its application in clinical practice, more non-lecture classes are allotted . Teaching methodology guidelines are provided which shall be followed while teaching, to make baseline uniformity in the process of learning.Activity-based learning will enable the internalization of the concepts and will build a strong platform while learning other subjects of Ayurved.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 13
Table 3: Learning objectives (Theory) of Course 21
Paper 1 21
Paper 2 38
List of Practicals 48
Table 4: Learning objectives (Practical) 49
Practical 1 49
Table 4a: List of Practical 60
Activity 68
Table 5- Teaching learning method 97
Table 6: Assessment Summary: Assessment is subdivided in A to H points 98
6 A-Number of Papers and Marks Distribution 98
6 B - Scheme of Assessment (formative and Summative) 98
6 C - Calculation Method for Internal assessment Marks 99
6 D - Evaluation Methods for Periodical Assessment 99
6 E Question Paper Pattern 100
6 F Distribution of theory examination 101
Paper 1 101
Paper 2 102
6 G Blue print of paper I & II 103
6 H Distribution of Practical Exam 106
References Books/ Resources 111
Abbreviations 114

Course Code and Name of Course

Course code	Name of Course
AyUG-RB	Rasashastra evam Bhaishajyakalpana

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-RB At the end of the course AyUG-RB, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of principles of Ayurvediya Aushadhi Nirmana (Ayurvedic Pharmaceutics)	PO1,PO5,PO7
CO2	Demonstrate application of principles of Ayurvediya Aushadhi Prayoga Vigyana (Clinical Pharmacology)	PO1,PO5,PO7
CO3	Prepare Ayurvedic formulations in adherence to quality control parameters for raw materials, in-process and finished products	PO1,PO3,PO4,PO5, PO6,PO7,PO8
CO4	Justify rationality of selection and administration of Ayurvedic formulations	PO3,PO5,PO6,PO7, PO8,PO9
CO5	Demonstrate application of ethical, legal and regulatory aspects of manufacturing and sale of Ayurvedic formulations.	PO2,PO8,PO9
CO6	Appraise research in current and emerging trend in Ayurvedic pharmaceuticals and allied sciences.	PO7,PO9

Table 2 : Contents of Course

Paper 1 Ayurvediya Aushadhi Nirmana Vigyana					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**1.Chronological development of Ayurvediya Aushadhi Nirmana** Definition, chronological development, significance and scope of Rasashastra and Bhaishajya Kalpana. Concept of Rasashala , Rasa-mandapa and Bheshajagara Concept of Rasa-Rasayana Briefing on Indians are first to prepare metal based medicines and Recent development in Ayurvedic Pharmaceuticals.	1	05	2	1
2	**2.Paribhasha (Terminology)** 1. Definition and Importance of Paribhasha 2. Word Derivation- Aushadha, Bheshaja, Kalpana, Kashaya, Pancha kashaya Yoni, Samskara 3.Dravya/Varga Paribhasha- (Classical Names, English names,Chemical Composition/ Formula) A) Rasa, Maharasa, Uparasa, Dhatuvarga, Upadhatu, Ratna, Uparatna, Sudhavarga, Sikatavarga, Lavanavarga, Visha, Upavisha, Kajjali, Mitrpanchaka, Dravaka Gana, B) Sandigdha(Contraversial): Vaikranta, Chapala, Rasanjana, Pushpanjana, Vahnijara, Girisindura, Kankushtha. C) Anupalabdha (Not Available): Rasaka, Sauviranjana D) Krutrima (Artificial): Sasyaka, Gandhaka, Kasisa, Rasanjana, Hingula E) Pratinidhi (Substitute) : Vajrabhave Vaikranta, Suvarna-Suvarna Makshika 4. Prakriya Paribhasha- A) Shodhana: Types of Shodhana, Samanya Shodhana, Vishesha Shodhana, Different techniques used for Shodhana, Swedana, Mardana, Dhalana, Nirvapa, Nirjaleekarana, Nimajjana, Bhavana,Bharjana B) Marana,: Definition, Importance of Marana, Types of Marana- Agnipaka Method, Putapaka Method, Kupipakwa Method, Bhanupaka Method, Swanga Sheeta C) Amrutikarana, Lohitikarana D) Sattvapatana, Shuddhavarta, Beejavarta E) Druti: Definition, Druti lakshana F) Parada Samskara: Definition, Importance, Ashtasamskara Parada Jaranaa, Murchchhana, Names of Parad-Bandhas 5) Pramanikarana Paribhasha (Terms for Standardization)- A) Grahy-Agrahyattva, Siddhilakshana B) Bhasma pariksha: Varitara, Rekhapurnata, Unama,	1	10	8	4

	Slakshnattva, Sukshma, Anjana Sannibha, Dantagre na Kachakacha Bhavati, Varna, Avami, Apunarbhava, Niruttha, Gata Rasattva, Nischandrattva, Niramlattva, Nirdhumattva, Jihvagre adahyamanattva, Dadhi/ Nimbu Pariksha, 6) Puraka Paribhasha (Supplementary)- Rudra Bhaga, Dhanvantari Bhaga7) Mana-Paribhasha- A) Definition, Classical Types B) Classical and Modern- Conversion chart as per AFI, Scientific Metrology C) Essential Kala- mana.				
3	**3.Adharbhuta Siddhanta (Application of fundamental principles)** **Dravya Sangrha and Samrakshana** • Time of drug Collection • General Rules • Specific time for specific plant part collection • Time of the day for drug collection • Collection of Pranija Dravya • Place of Drug collection Bhumi mahabhuta predominance • Places from where drugs should not be collected • Stage of drug collection • Rule of Duplication(Dwiguna Mana Ganana) • Ardra and Shushka Dravya mana • Dravya Sangraha Vidhi and Dravya samrakshana • Rasa, Guna, Virya ,Vipaka, Prabhava**Anukta Visheshokta grahana:** Considering Anukta Dravya **Aushadha Namakarana:** Naming a Preparation **Aushadha Sevana Kala:** Time of Drug Administration **Saveeryata Avadhi** (Shelf life of different kalpana) **Aushadha Matra:**Dosage / Posology **Anupana & Sahapana (Adjuvant)** **Yougika Dravya Siddhanta(Drug Combination)**	1	05	4	2
4	**4.Yantropakaranani- I (Equipments and machineries) Principles involved, currently used yantras, their correlation, utility, and Instruments used in Large scale Production** Dola Yantra Valuka Yantra Puta Yantra Khalwa Yantra Patana Yantra Darvika Yantra Ulukhala Yantra Patala Yantra Kupi Yantra Arkapatana Yantra Pithara Yantra	1	05	6	4

	Sharava Yantra Palika Yantra Sthali Yantra Swedana Yantra Vidyadhara Yantra **Modern Machinery-**Grinder Disintegrator Pulverizer Powder Mixer Mechanical sifter Ball mill Granulator Dryer Tablet compressing machine Pills making machine Coating pan Polishing pan End runner machine Edge runner machine Capsule filling machine Ointment mixer Tube filling machine Sieves & Meshes Liquid filling machine Distillation plant Strip packing machine Pouch filling machine Pyrometer				
5	**5.Yantropakaranani -II (Equipments, fuel and Heating Devices)** **Principle involved, importance of temperature, currently used heating devices utility, quantum of heat and Instruments used in Large scale Production Puta-** Chandra Puta Surya Puta Maha Puta Gaja Puta Varaha Puta Kukkuta Puta Kapota Puta Lavak Puta Budhar Puta Gorvara Puta Valuka Puta Kumbha / Bhanda Puta **Musha** Samanya Musha Crucibles- Silica Mudra	1	05	5	4

	Sandhi Bandhan Material **Koshthi-** Chullika Angar Koshthi Satwapatan Bhrashtri Gas Stove Hot Plate Heating Mantle Induction Stove Hot Air Oven Muffle Furnace- Horizontal and Vertical **Heating Material-** Solid- Kashtha, coal(wooden / stone), Kshara, Lavana, Valuka, Shakrit, Dhanya Drava- Jala/ steam, Taila Indirect heating- Dhanya Rashi, Bhugarbha sthapana				
6	**6.Kalpana Nirmana I (Primary & Secondary dosage forms)** **Definition, classification with suitable examples, reference ingredients, quantity, method of preparation, principle involved, instruments used in small and large scale production, siddhi lakshana, storage, shelf life, modern aspect of related preparation of the following** **Panchavidha Kashya Kalpana (Primary dosage forms):** Swarasa, Kalka, Kwatha, Hima, Phanta **Upaklpana (Secondary dosage forms):** **Kalka:** Churna Kalpana **Kwatha:** Pramathya Kalpana, Paniya Kalpana, Ushnodaka, Ksheera Paka Kalpana, Laksha Rasa, Mamsa Rasa **Hima Kalpana :** Mantha Kalpana, Udaka Kalpana, Panaka Kalpana **Phanta Kalpana:** Arka	1	10	6	4
7	**7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements))** **Avaleha** Definition, reference, essential ingredients, general method of preparation, specific rules of avaleha preparation, importance of temperature, siddhi lakshana, shelf life with examples i.e Vasavaleha, Kushmanda avaleha, research updates on Avaleha Kalpana, market survey **Sneha Kalpana** Aims of Sneha Kalpana, definition,reference, essential ingredients, general method of preparation, specific rules of sneha preparation, importance of temperature, gritha murchana, taila murchana, sneha siddhi lakshana, types of snehapaka, Patra(Gandha Paka), time duration to cook sneha preparation, shef life with examples Phala grita and	1	10	5	4

	Ksheerabala Bala Taila, Concept of Avartana, Research updates on snehakalpana, market survey **Sandhana Kalpana** Introduction, significance of sandhana kalpana, classification, difference between Madhya and Shukta Kalpana, general method of preparation, essential ingredients, anukta Mana, sandhana vidhi, observations, Burnig candle test, Lime water Test, important factors in Asava Arishta Preparation like sandhanan patra selection, place for fermentaion, importance of room temperature, sandhana kala, adding of honey, bhasma, prakshepaka dravya, difference between Asava & Arishta, shelf life and alcohol % with examples Draksharista and Usheerasava, Research updates on Sandhana Kalpana, market survey **Pathya Kalpana** Definition , significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krashara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Market survey of Dietary Supplements				
8	**8.Rasa Dravya Parichaya- I** **Synonyms, minerological identification, sources, types, grahya and agrahyata, doshas, shodhana, marana and other processing techniques, Probable Physico-chemical Changes, importance of temperature while processing , yoga, Research updates of the following** **Must to know Drugs** Parada (mercury) Abhraka (Biotite Mica) Makshika (Chalco-pyrite) Shilajatu(Asphaltum Punjabianum) Gandhaka (Sulfur) Gairika(Red Ochre) Kankshi (Alum) Haratala (Orpiment) Manahshila (Realgar) Kampillaka(Mallotus Philippinensis) Navasadara (Ammonium chloride) Hingula (Red Cinnabar) Swarna (Gold) Rajata (Silver) Tamra (Copper) Loha (Iron) Mandur (rust iron) Vanga (Tin) Naga (Lead) Yashada (Zinc) Mukta (Pearl), Pravala (Coral)	2	10	12	4

	Vajra (Diamond) Kaparda (Cowries) Shukti (Oyster Shell) Shankh (Conch Shell) Godanti (Gypsum) Samudraphena (Cattle Fish bone) Kukkutanda twak (Hen's EggShell) Tankana kshara (Borax)				
9	**9.Rasa Dravya Parichaya II** **Synonyms, mineralogical identification, sources, types, grahya and agrahyata, shodhana, marana and other processing techniques with probable chemical reactions, the importance of temperature, yoga, research updates of the following: Desirable to know drugs:** Sasyaka (Peacock ore) Kaseesa (Green Vitriol), Gauri pashana (Arsenic oxide); Trinakanta, Akika(Agate), Sudha (Lime stone), Khatika Ajashthi; Jaharmohara (Serpentine) Dugdhapashana (Talc)	2	5	7	6
10	**10.Rasadravya Parichaya III** **Synonyms, Minerological Identification, sources, types, Grahya, Agrahyata, Shodhana, Marana, Probable Chemical Changes, Properties,dose, Ashuddha/Apakwa Bhasma Sevanajanya Vydhi and their shantyupaya, yoga, Research updates** **Nice to know drugs:** Vaikrantha, Vimala (Iron Pyrite), Chapala Rasaka Anjana Kankustha Agnijara Giri Sindura (Red oxide of Hg) Mriddara shringa (Litharge) Kamsya (Bronze) Pittala (Brass) Vartaloha. Manikya (Ruby) Tarkshya (Emerald) Pushparaga (Topaz) Nilam (Sapphire) Gomeda (Zircon or Cinnamone stone)	2	5	3	6

	Vaidurya (Cats eye) Mriga shringa (Stag horn) Sikata (Silica) Vyomashma (Sangeyashab - Jade) Kousheyashma (Asbestos) Badarshama (silicate of lime)				
11	**11.Kalpana Nirman -III (Method of Preparation of different dosage forms)** **Sharkara Kalpana** • General method of preparation, difference between sharkara kalpana and syrup, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Tulasi Arka Sharkara **Gudapaka** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of ManibhadraGuda, Guda Pippali **Lavana Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Narikela Lavana **Kshara Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Kadali Kshara, chincha Kshara **Ayskriti Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example Ayaskriti **Lepa Kalpana** • General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of	2	10	8	6

	Avalgunjadi Lepa, Keshavardhaka Lepa.				
12	**12.Chaturvidha Rasayana** **Introduction, definition, importance, types, Procedure, necessary equipment, Shelf life with following exampleKharaliya Rasayana**: Shwasakuthara rasa and Vatavidwansana rasa **Parpati Rasayana:** Loha parpati and sudha parpati **Kupipakwa Rasayana**: Rasasidhura and Rasa karpura **Pottali Rasayana**: Tamragarbha pottali and Loha grarbha pottali	2	10	4	4
13	**13.Current and emerging trend in Ayurvedic pharmaceuticals** **Cosmetics-Formulation, Regulatory Provisions**Brief Introduction to Cosmetics-Formulation, Regulatory Provisions, Plant Layout and other factory requirements, process used in the manufacture of Cosmetics, Most commonly used cosmetic Raw materials , Control of microbial contamination in the manufacture of cosmetics and Quality Control of cosmetics, Skin Sensitization Sensitivity Testing, In vitro-Tests for Skin Irritation, Quality Control of Raw materials, Intermediates and Finished Products, Stability of Cosmetics**Introduction to Dosage forms**Introduction, Classification of Dosage forms(Solid dosage forms, Liquid dosage forms and Semisolid dosage forms), Need of dosage forms.	3	5	3	4
14	**14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs** **Brief overview of following** • **Drug and Cosmetics Act** 1940 and Rules1945 import, manufacture, sale distribution of drugs and cosmetics standards of quality, misbranded, adulterated, spurious drugs and cosmetics as amended from time to time. **New Acts related to Drugs and Devices.** • **Good Manufacturing Practices** (GMP) of ASU Drugs in accordance to Schedule- T **Food Safety and Standards Authority of India** (FSSAI) and **FDA** Approval Drugs.	3	5	2	4
Total Marks			**100**	**75 hr**	**57 hr**

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
15	**1.Aushadhi Prayoga Vigyana** Introduction, Ethymology, Scope of Aushadhi Prayoga vigyanaPrashastha bheshaja Lakshana	1	5	1	2
16	**2.Single drug (Herbal & Mineral)** **Single drug its variety of formulations and their different indications• Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication (as applicable)** **• Research updates and clinical evidences for each of the following formulations** **Guduchi** Guduchi Swarasa (Sha.Sam.Ma. Kh. Chp1/7 page 138) Guduchyadi Churna (B.R. Pleehayakrut Rogdhikara) Guduchi Kwatha (B.R. Jwaradhikara) Guduchi Hima (B.R. Chardi Rogadhikara) Guduchi Ghana- Samshamani Vati (AFI Part II Page 183) Guduchi Satva (AFI-Part I, Page 205) Amrutadi Guggulu (AFI-Part III, Page 107) Amritarishta (AFI Part I page 6) **Amalaki** Amalaki Swarasa (Sha.Sam.Ma.Kha.) Amalakyadi Churna (Sha.Sam.M.Kha. Churna kalpana) Triphala Rasayana (Cha.Chi. Rasayana Adhyaya) Chyavanaprasha (AFI Part I page 37) Dhatri Lauha (AFI Part I Page 284) Amalakyadi Gutika (Sha.Sam.Ma.Kha.Vati Kalpana) Phalatrikadi Kwatha (Sha.Sam.Ma.Kha.Kwatha Kalpana) Triphala Ghrita (Sha.Sam.Ma.Kha. Ghrita Kalpana) **Bhallataka** Bhallataka Modaka (B.R. Pleeha-Yakrit Rogadhikara) Bhallataka Ghrita (B.R. Gulma Rogadhikara) Bhallataka Guda (B.R. Arsha Rogadhikara) Bhallatakadi Taila (B.R. Nadivrina Rogadhikara) Bhallataka Avaleha (B.R. Arsha Rogadhikara)	1	10	8	2

	Bhallatakadi Lepa (B.R. Kushta Rogadhikara) Bhallatakadi Kwatha (B.R. Urusthabha Rogadhikara)Note: For Bhallataka additional ashuddha, avidhi sevanajanya vyadhi and their shantyupaya**Gandhaka** Gandhaka churna (SY page 217) Gandhaka Rasayana (AFI-Part II, Page 115) Gandhaka Druti (RRR 3rd Chapter) Gandhaka Taila (R.T. 8th Chapter) Gandhakadya Malahara (AFI-Part II, Page 165) Gandhakadi Lepa (RRS Shiroroga Chikitsa) Gandhaka Vati (B.R. Agnimandya Rogadhikara) **Gairika** Gairika Pradeha (Cha.Chi. Visarpa Rogadhyaya Laghusuta shekhara Rasa (AFI Part II Page 282) Gairikadya Malahara (AFI-Part III, Page 224) Gairikadya Gutikanjana (B.R. Netraroga) Gairika rasakriya (Cha.Chi.26/235) Varnakara lepa (Cha.Chi.25/117)				
17	**3.Single drug(Bhasma, Shuddha & Pishti)** **• Single drug/ formulation and its mode of action in different indications** **•Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication(as applicable)** **• Ashuddha apakwa, avidhi sevanajanya vyadhi and their shantyupaya,** **• Research updates and clinical evidences for each of the following formulations:** Abhraka Bhasma Swarna Makshika Bhasma Swarna Bhasma Rajata Bhasma Lauha Bhasma Tamra Bhasma Vanga Bhasma Naga Bhasma Yashada Bhasma Kasisa Bhasma Shuddha Shilajatu Shuddha Gandhaka Shuddha Gairika	2	15	12	6

	Shuddha Kankshi Mukta Pishti & Bhasma Pravala Pishti & Bhasma Vajra Bhasma Kaparda Bhasma Shankh Bhasma Godanti Bhasma Shuddha Tankana Shuddha Kankshi				
18	**4.Aushadhi Kalpa -I (Compound formulations)** **•Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties and its mode of action in different indications,** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication(as applicable)** **• Ashuddha apakwa processed , avidhi sevanajanya vyadhi and their shantyupaya,** **• Research updates and clinical evidences for each of the following formulations:** **Kharaliya Rasayana** • Arogyavardhini Gutika : A.F.I. - I, Rasayoga, 20:4, R.R.S. Visarpa Chi. 20/106 • Kumara Kalyana Rasa : A.F.I. - I, Rasayoga, 20:9, B.R. Balaroga / 163 • Garbhapala Rasa : A.F.I. - II, Rasayoga, 16:14,R.T.Sa. Part - I, 140 Chandraprabha Vati : A.F.I. - I, Vati Gutika, 12:10,Sha.Sa.M.7/40 • Pravala Panchamrita Rasa : A.F.I. - II, Rasayoga, 16:37,B.R. Gulma / 139 • Anandbhairava Rasa : A.F.I. - I, Rasayoga, 20:3,R.Sa.Sa.Jwara 2/103 • Yogendra Rasa : A.F.I. - I, Rasayoga, 20:31,B.R. Vatavyadhi / 506 • Laxmivilas Rasa : A.F.I. - I, Rasayoga, 20:39, B.R. Rasayana / 55 • Vasantakusumakara Rasa : A.F.I. - I, Rasayoga,20:42,R.Sa.Sa.Rasayana Vajikarana / 80 • Vasantamalti Rasa : A.F.I. - I, Rasayoga, 20:41, Si.Bhai.Ma.Ma.Jwara / 60 • Brihat Vata Chintamani Rasa : A.F.I. - I, Rasayoga, 20:26,	2	15	16	4

	B.R.,Vatavyadhi/502 • Shankha Vati : A.F.I. - I,Vati Gutika, 12:32,B.R. Agnimandya / 182 • Shwaskuthara Rasa : A.F.I. - I, Rasayoga, 20:49,Yo.Ra., Swasa / Page 373 • Kamadudha Rasa : A.F.I. - II, Rasayoga, 16:9,R.Ta.Sa. Kharaliya Rasayana / 80 • Sutashekhar Rasa : A.F.I. - II, Rasayoga, 16:63,Yo.Ra. Amlapita / Page 125 • Navayasa Loha : A.F.I. - II, Lauha, 17:2,Cha.Sa.Chi.16/70 • Ichchhabhedi Rasa : A.F.I. - I, Rasayoga, 20:5,B.Ra. Udararoga / 84 • Krimikuthara Rasa : A.F.I. - II, Rasayoga, 16:12,R.Ta.Sa.Kharaliya Rasayana / P. 103 **Parpati Rasayana** • Panchamruta Parpati : A.F.I. - I, Parpati, 16:1, B.R.Grahani / 461 • Bola Parpati : A.F.I. - I, Parpati, 16:2, Yo.R.,Pradara / P 842 **Kupipakwa Rasayana** • Swarna Vanga : A.F.I. - I, Kupipakva, 15:9, Rasamruta 3/ 95 • Makaradhwaja : A.F.I. - I, Kupipakva, 15: 2, B. R. Vajikarana 2/ 237 • Sameerpannaga Rasa : A.F.I. - I, Kupipakva, 15:8, A.A.G.S. Part - 4 Page 88 **Pottali Rasayana** • Hemagarbha Pottali : A.F.I. - II, Rasayoga, 16:66, Rasamruta Rasavigyaniya 9/218				
19	**5.Aushadhi Kalpa-II (Compound Drugs/Formulations)** **• Chemical/phytochemical composition** **• Pharmacodynamics and pharmacokinetics as per formulation** **• Therapeutic properties and its mode of action in different indications,** **• Awasthanusara Uses(as applicable)** **• Matra** **• Anupana** **• Pathyapathya** **• Sevana Kala** **• Kala maryada (duration of medication as applicable)** **• Side effects of medication(as applicable)** **• Improperly processed , avidhi sevanajanya vyadhi and their shantyupaya,** **• Research updates and clinical evidences for each of the following formulations**: Dashamoola Kwatha (AFI Part I Page 55) Mahamanjistadi Kwatha (AFI Part I page 59)	3	15	14	2

	Pushyanuga Churna (AFI-Part I, Page 113) Sudarshana Churna (AFI Part I Page 116) Lavana Bhaskara Churna (AFI-Part I, Page 114) Bilvadi Gutika (AFI Part I Page 188) Chitrakadi Gutika (AFI-Part I, Page 186) Sanjivani Vati (B.R. Jwaradhikara) Vyoshadi Vati (AFI Part III Page 253) Bala Chaturbhadra Rasa (B.R. Balarogadhikara) Simhanada Guggulu (AFI-Part I, Page 71) Yogaraja Guggulu (AFI-Part I, Page 69) Chyavanaprashavaleha (AFI Part I page 37) Dadimavaleha (Y.R. Jwaratisaradhyaya) Panchagavya Ghrita (AFI Part I Page 90) Brahmi Ghrita (AFI Part I Page 93) Narayana Taila (AFI Part I Page 138) Neelibhringadi Taila (AFI Part I Page 139) Panchaguna Taila (AFI-Part II, Page 145) Aravindasava (AFI Part I page 7) Ashokarishta (AFI Part I page 8) Kumaryasava (AFI Part I page 10) Kutajarishta (AFI Part I page 10) Gandhakadya Malahara (AFI-Part II, Page 165) Lepa Guti (AFI Part III page 232)				
20	**6.Dosage Forms & Cosmetic Products** Definition of dosage form,-Cosmetics Advantages and disadvantages of currently available dosage forms and cosmetics. Route of their administration. Research updates on modification of classical Ayurvedic dosage forms and relevant case studies.	3	5	5	2
21	**7.Nutraceuticals** **Introduction** **Types, non Indian nutraceuticals and their uses** **Ayurvedic Perspective of Nutraceuticals** **with special reference to dietic preparation, rasayana with one examples for each category , mode of action, nutritional value calculation, research updates and case studies on below mentioned category** **General Health** : Kushmanda avaleha **Pediatric Health**: Preenana Modaka(Kashyapa) **Geriatric Health**: Chavanaprasha avaleha **Reproductive Health**: Phala Grita **Women's health:** Soubhagya shuntipaka, Shatavari grita **Cardio-protective**: Arjuna Ksheerapaka & Rasona ksheera paka **Sports endeavor**: Kharjuradi mantha **Mental health**: Brahma Rasayana	3	5	6	1
22	**8.Anupana Prayoga for Aushadhi Kalpa**	3	5	4	1

	Properties of Anupana **Factors to be considered for selection of Anupana** **•Dosha** **•Aushadha** **•Roga/ Rogi** **•Ahara** **Purpose of Anupana** **Contraindications of Anupana** **Eka Kalpa Vydi anusara aneka Anupana for following yogas** **1.Kaishore Guggulu:** Sarangadhar Samhita , Madhyam khanda- 7/72-81, P: 136**2. Yogaraj, Guggulu:** Sarangadhar Samhita Madhyam khanda- 7/56-69, P:135**3. Narayana Churna**: Sarangadhar Samhita of Pandit Sarangadharacharya, , Madhyam khanda- 7/83-91, P:123-124**4.Rasa Sindoor:** RasaTarangini Hindi commentary of Sri Sadananda Sarma,Chaukhambha Surbharti, Murcchana vigyaniya Taranga, 6/203-234, P: 125-127**5. Rasa Parpati:** Rasa Tarangini of Sri Sadananda Sarma,Chaukhambha Surbharti Prakashan, Murcchana vigyaniya Taranga, 6/144-153, P: 116-117**6.Kankayan Vati** : Sarangadhar Samhita Surbharti Prakashan, Madhyam khanda, 7/50-55, P: 134-135)				
23	**9.Aushadhi Prayoga Marga** **Introduction** **Types in ayurveda** **Advantages and disadvantages of each aushadhi prayoga marga and probable mode of action after administration of following dosage forms in below mentioned routes** 1. Mukha (Oral Cavity): Vati, Gutika, Churna, Asava, Arishta,Kashaya, Avaleha, Khanda, Sneha (Ghrita/Taila), 2. Nasa(Nasal Route)- Dosage form used - Churna, taila, swarasa, arka 3. Karna (Through Ear)- Taila, Ghrita 4. Akshi (Through Eyes)- - Ghrita, Taila, 5. Twak (Through Skin)- Lepa, Alepa, Pralepa, Malahara, upanaha,pradeha, abhyanga, udvartana • Shirodhara - Takra • Abhyanga- Sahacharadi Taila • Ashti Bhagna- Murivenna Taila • Vrana- Jatyadi Taila • Smashru – Shankha Bhasma • Kesha Ghanata- Bringaraja Taila • Akala Palita – Hasthi Danta Masi • Indralupta – Icchabhedi Rasa • Lomashatana – Lomashatana Lepa 6. Guda (Anal Route)- Dosage forms - Vartis, taila, ghrita, kalka, churna, kashaya 7. Mutra marga (Through urethra)- Uttara Basti with	3	10	5	1

	Dosage forms- Taila, ghrita 8. Yoni marga (Through vagina)- Yoni Dharana, Yoni Dhavana, Yoni Pichu, Yoni Dhoopana				
24	**10.Rational prescription along with safe dispensing of Ayurvedic formulations.** Rational prescription along with safe dispensing of Ayurvedic formulations as per NABH guideline	3	5	1	4
25	**11.Traditional & Local health Practices** Introduction to Traditional & Local health Practices and Government initiatives to preserve it. Brief introduction to TKDL	3	5	2	4
26	**12.Pharmacovigilance for Ayurveda drugs** Pharmacovigilance and Adverse Drug Reactions (ADR) Pharmacovigilance Programme of Ayurveda, Siddha, Unani and Homeopathy (ASU & H) Drugs Central Sector Scheme and Centres of Pharmacovigilance of ASU & H Drugs	3	5	1	4
Total Marks			**100**	**75 hr**	**33 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1 Ayurvediya Aushadhi Nirmana Vigyana									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1.Chronological development of Ayurvediya Aushadhi Nirmana (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Explain historical evolution of Ayurvediya aushadhi nirman and Rasashastra.	CK	MK	K	L&GD	TT-Theory	F&S	I	
CO1	Describe about contribution of Nagarjuna Acharya to Rasashastra	CK	MK	K	L_VC	TT-Theory	F&S	I	
CO1	Enlist important classical texts of Rasashastra and describe their unique features in short.	CK	DK	K	L&PPT	TT-Theory	F&S	I	
CO1	Describe structure of Pharmacy and enlist formulations prepared in pharmacy, after visiting the unit of teaching pharmacy of own campus	CC	MK	KH	L&GD	CL-PR	F	I	
CO1	Describe Recent development in Ayurvedic Pharmaceuticals viz, new dosage forms, pharmaceutical modification techniques.	CK	DK	K	L&PPT	TT-Theory	F&S	I	
CO1	Define Rasa and Rasayana and describe difference between Rasa and Rasayana	CK	DK	K	L&PPT	T- MEQs	F	I	

CO1	Justify design of ancient Rasashala	AFT-VAL	NK	KH	SDL	PRN	F	I	
Topic 2 2.Paribhasha (Terminology) (Lecture :8 hours, Non lecture: 4 hours)									
CO1	Explain the term Paribhasha and its importance in Ayurvediya Aushadhi Nirmana.	CK	MK	K	L	T-CRQs	F	I	
CO1	Discribe the terms Aushadha, Bheshaja, Kalpana, Kashaya, Kashaya yoni, Samskara- based on their word derivations	CC	MK	K	L	T- EW	F&S	I	
CO1	Enlist sequentially - names of all drugs classified in the varga(group). Recite shlokas of Maharasa, Uprasa , Sadharana Rasa Varga from Rasaratnasamuchchaya.	CC	MK	K	EDU,SDL,GBL,REC	P-REC,P-ID,PUZ,O-QZ	F&S	I	
CO1	Enlist and discuss Sandigdha, Krutrima, Pratinidhi and Anupalabdha dravya.	CK	DK	K	L&PPT,SDL,GBL	P-ID,CL-PR	F	I	
CO1,CO2	Discribe the definition of the term Shodhana. Explain with examples different techniques used for the procedures of Shodhana.	CAP	MK	KH	L&GD,L_VC,PT	T- MEQs,P-EXAM,O-QZ,O-GAME	F&S	I	
CO1	Explain the term Marana and describe its types with examples	CK	MK	K	L&PPT,LS	T-OBT	F&S	I	
CO1	Enlist all relevent prakriya paribhasha of Amrutikarana, Lohitikarana,Sattvapatana, druti and discuss with examples	CK	DK	K	DIS,LS	PRN	F	I	
CO1,CO2	Recite sequentially names of Parada Ashta samskara. Explain the terms Jarana Murchchhana and cite types with examples. Compare Jarana and Murchchhana.	CC	MK	KH	L_VC,PrBL	T-EMI,T- MEQs,PRN,M-CHT	F&S	I	

CO1	Identify names of Parada Bandhas	CK	NK	K	LS	T-OBT	F	I	
CO1,CO2,CO5	Describe Grahyagrahya parameters used for selection of Rasadravyas.	CK	MK	SH	L&PPT,PrBL	T- EW	F&S	I	
CO1,CO2,CO5,CO6	Illustrate all Bhasma pariksha as per classical description.	CC	MK	KH	L_VC,IBL,DA,D	T- MEQs,P-EXAM,CHK	S	III	
CO1,CO2,CO5	Define the word Siddhilakshani.Recite examples of classical siddhilakshani. Interpret its rationality	CE	MK	KH	L&PPT,SDL,REC,D_L	T- MEQs,P-EXAM	F&S	I	
CO1	Recognise and discuss Dhanvantari Bhaga and Rudra bhaga	CC	NK	K	RLE	C-INT	F	I	
CO1	Explain importance of Mana-paribhasha and classical types of Mana. Recall Charts of Mana .	CK	DK	KH	L&PPT,PSM	T-CRQs,P-SUR	F	I	
CO1,CO2	Categorize parameters of Drug Standardization and develop a checklist for assessment of quality of rasadravyas	CE	DK	KH	BS,IBL,TPW,SDL	CL-PR,WP,CHK	F&S	I	
CO2	Explain Value of selection of genuine raw material	AFT-VAL	MK	KH	DIS	DEB	F	II	
CO2,CO3	Explain importance of ethical practices for drug processing(Shodhan, Marana)	AFT-VAL	MK	K	PrBL	P-POS	F	II	
CO2,CO3	Discuss and justify importance of Bhasma Pariksha	AFT-RES	MK	KH	BS	T- EW	F&S	III	

CO2,CO3	Explain nalue of keen and accurate application of weights and measures in Ayurvediya Aushadhi nirmana	AFT-VAL	DK	K	L&GD	PRN	F	II	
Topic 3 3.Adharbhuta Siddhanta (Application of fundamental principles) (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO2	Elaborate fundamental principles of Ayurvediya Aushadhi Nirmana alongwith their classical references and discuss their application with classical examples of various kalpas.	CC	MK	KH	L&PPT,BS	T- EW,M-POS	F&S	I	
CO1,CO2	Explain Dravya Samgraha vidhi. Explain types of Bhumi desha and types of drugs to be collected from paricular place & places from where Dravya should not be collected.	CC	MK	KH	L&PPT,DIS,BS	T- EW	F&S	I	H-DG
CO1,CO2	Describe time of Dravya collection and explain rationality behind it.	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	H-DG
CO1,CO2	Enlist parts of Sthavara & Jangama Dravyas used for Ayurvediya Aushadhi nirmana.	CC	MK	KH	L&GD,BS	T- EW	F&S	I	H-DG
CO1,CO2	Define Samskara. Discuss role of Samskara in Ayurvediya Aushadhi Nirmana alongwith various examples.	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	H-Samhita
CO1,CO2	Discribe Ardra - Shushka Dravya & Anukta – Visheshokta Dravya collection principles.	CC	MK	KH	L&PPT,DIS	T- EW	F&S	I	H-DG
CO1,CO2	Describe importance of kalpa sevan matra. Explain factors considered for deciding dosage of any drug (Ayurvedic as well as modern medicine principles). Describe Posology	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	
CO1,CO2	Explain Saveeryata Avadhi(Shelf life) of Ayurvedic dosage forms.	CK	DK	K	L&PPT,DIS	T- MEQs,P-VIVA	F&S	I	
CO1,CO2	Discuss Yogika Dravya Sidhdhanta(Drug combination)	CC	MK	KH	L&PPT,BS	T- EW	F&S	I	
CO1	Explain importance of Kala (Time) Samskara in Ayurvediya	CK	MK	K	L&PP	TT-Theory	F&S	I	

	Aushadhi Nirmana. Elaborate Aushadhi sevana kala mentioned in Sharangdhara samhita. Discribe chrono- Therapeutics.				T				
CO1	Justify Aushadhi kalpa namakarana siddhanta with examples	CC	DK	KH	IBL	CL-PR	F	I	
Topic 4 4.Yantropakaranani- I (Equipments and machineries) (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO5	Choose and record contemporary machines used in Ayurvedic drug preparation.	CC	DK	K	L&PP T,DIS	T- EW	F&S	I	
CO1,CO5	Discuss the pharmaceutical use of Distillation apparatus, Ball Mill, Pulveriser, End Runner, Edge Runner, Tablet compression machine, Capsule filling machine, Pouch filling machine, Liquid filling machine in Ayurvediya Aushadhi Nirmana	CC	DK	K	L&PP T,DIS	T- EW	F	I	
CO1,CO5	Describe the principles behind construction and working of the classical Yantras used for Ayurvediya Aushadhi nirmana.	CAP	MK	KH	L&PP T,DIS	T- MEQs,P-VIVA	F&S	I	
CO1,CO5	Enlist categorical information about the following Yantras in the charts- Ulukhal Yantra, Patan Yantra, Jarana Yantra, Patala Yantra and Swedana Yantra.	CK	DK	K	L&PP T,DIS	T- EW	F	I	

CO1,CO5	Interpret the mechanism and effect of Yantras / machines on the Physical and Chemical properties of the drug material.	CC	DK	KH	DIS,IBL	M-POS	F	I	
CO1	Enlist Ayurvediya aushadhi kalpana and equipments/yantras/ machines used for preparation of each kalpana.	CK	DK	K	L&PPT	T- EW	F	I	
Topic 5 5.Yantropakaranani -II (Equipments, fuel and Heating Devices) (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5	Describe the term Yantra and enlist yantras described in classics useful for aushadhi nirmana. -	CK	DK	K	L&PPT	TT-Theory	F	I	
CO1,CO5	Define the term Puta and recite its classical explanation.	CK	MK	K	L_VC,RLE	T- EW,M-POS	F&S	I	
CO1,CO5	Produce categorical information(Size of Pit, Number of cowdunkcakes, use etc.) about following Putas viz. Mahaputa, Gajaputa, Varahputa, Kukkutaputa, Kapotputa, Lavakputa, Kumbhaputa, Bhandaputa, Valukaputa and Bhudharputa.	CK	MK	K	L&PPT,DIS,TPW	T- EW,M-POS,COM	F&S	I	
CO1,CO5	Recognise the principles behind construction and working of the classical Putas.	CC	MK	KH	L&PPT,DIS,IBL	T- EW,M-POS	F&S	I	
CO1,CO5	Identify and enlist contemporary devices used in the preparation	CC	DK	K	L&PP	T- MEQs,QZ	F&S	I	

	of Bhasma.				T,DIS ,IBL	,M-POS			
CO1,CO5	Review the temperature pattern of various Putas by referring research articles.	CC	DK	K	TPW, SDL	QZ ,M-POS	F&S	I	
CO1,CO5	Compile names and significance of temperature measuring devices with reference to Puta.	CK	DK	K	DIS, ML	CL-PR,M-POS	F	I	
CO1,CO5	Enlist the specific Puta used for a particular Bhasma Nirmana.	CC	DK	KH	L&PPT	CL-PR,M-POS	F	I	
CO1,CO5	Enlist various devices used for heating during Ayurvediya Aushadhi nirmana.	CK	DK	K	L,DIS ,RLE, FV	T- EW,P-SUR	F&S	I	
CO1,CO5	Enlist constituents needed for Samanya Musha Nirmana.	CK	DK	K	L&PPT,IBL	T- MEQs	F&S	I	
CO1,CO5	Define the term Musha and describe uses of various types of Musha.	CK	DK	D	L_VC ,D-M	T-OBT	F&S	I	
CO1,CO5	Enlist and discuss the material used for Sandhi Bandhan (while using Sharava and Kachakupi)	CK	NK	K	DIS,RLE	T-OBT	F	I	
CO1,CO5	Identify and record the types of Crucibles .	CK	NK	K	L&PPT	M-POS	F	I	

CO1,CO5	Interpret the effect of heat transformation in the material subjected to heating through Musha.	CAP	DK	KH	L&PPT,DIS,D-M	PRN,CL-PR	F	I	
CO1,CO5	Recall Pakaj Utpatti Siddhant and interpret it for Agni Sannikarsha Sanskara.	CC	DK	KH	L&PPT,DIS	T- EW,CR-RED	F&S	I	
CO1,CO5	Explain the Pharmaceutical use of the Hot plate, heating mantle, induction stove, hot air oven, muffle furnace (horizontal and vertical type)	CC	NK	KH	DIS,SDL	P-SUR,M-POS	F	I	
CO1	Describe types of Koshthi and their uses	CK	DK	K	L	COM	F	I	
CO1,CO5	Describe the Current trends in heat transfer device e.g. steam jacketed heating device, programmed muffle furnace, programmed furnace for Parpati / Pottali preparation.	CC	DK	K	L&PPT,IBL,SDL	M-POS,COM	F	I	
CO1,CO5	Assess and interpret the effect of fuel in quantum of heat given (time and temperature)	CC	DK	KH	DIS,PrBL	M-POS,CR-RED	F	I	
CO1,CO5	Enlist various fuels used for heating for estimation of their heat value.	CK	NK	K	IBL,SDL	M-POS	F	I	
CO2,CO3	Analyse and appraise use of proper heating device and fuels used for Ayurvediya Aushadhi Nirmana.	AFT-SET	DK	KH	BS	DEB	F	II	
Topic 6 6.Kalpana Nirmana I (Primary & Secondary dosage forms) (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO2	1. Explain Kashaya kalpana 2. Enlist the dosage form come under Panchavidha Kashaya	CC	MK	KH	L	T- EW,P-VIVA	F&S	II	

	Kalpana and their Upakalpana 3. Justify Primary , secondary and tertiary dosage form under Panchavidha kashaya Kalpana and their Upakalpana								
CO1	Define with synonyms and classify different varieties of the dosage form in Ayurvediya Aushadhi nirmana	CK	MK	K	L	T- EW,P-VIVA	F&S	II	
CO1	Describe methods of preparation of the dosage form along with the principles of extraction, concentration and dilution etc.	CC	MK	KH	L&PPT	T- EW,P-VIVA	F&S	II	
CO1,CO2	Explain in details about Standard Operating Procedure (SOP) of each kalpana.	CC	MK	KH	L&PPT,DIS	T- EW,P-VIVA	F&S	II	
CO1,CO3	Enlist details of the applications/administration (samanya Matra, Anupana or sahapana, indications and contraindications) of the dosage form with various examples	CC	MK	K	L&PPT	T- EW,P-VIVA	F&S	II	
CO1,CO6	Assess and discuss modern day development and market trend of the dosage form	CC	DK	K	L&GD,IBL,LS	T- MEQs,P-SUR	F&S	II	
CO1	Determine the advantages and disadvantages of the dosage form	CC	DK	K	L	T- EW,P-VIVA	F&S	II	
CO2	Describe method of preparation of dosage form along with the principle involved	CK	MK	K	L&PPT,DIS	T- EW,P-VIVA	F&S	II	
CO1	Describe meaning of the term Upakalpana. Enlist panchavidha kashaya kalpana and their respective Upakalpana	CK	DK	K	L	T- MEQs,P-VIVA	F&S	II	
CO1	Explain various kalpas belonging to Various dosage forms	CK	MK	K	L_VC	P-EXAM	S	II	

	-Ingredients, proportion, matra, sevan vidhi if any, therapeutic uses				,PT				
CO2	Critically evaluate rationality behind different proportion of water used in various formulations	AFT-VAL	DK	KH	BS	P-VIVA	F&S	III	
Topic 7 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5	Explain the basic principles involved , processing techniques,quality control parameters used/ involved in the preparation of Avaleha, Kalpana with examples ,instruments used in small and Large scale production,Research updates	CAP	MK	K	L&PPT,TPW,BL	T- EW,T-OBT	F&S	II	
CO1,CO5	Explain the basic principles involved , processing techniques,quality control parameters used/ involved in the preparation of Sneha Kalpana, Kalpana with examples ,instruments used in small and Large scale production,Concept of Avartana, Research updates on Snehakalpana, Market survey	CK	MK	K	L_VC,TUT	T- EW,P-VIVA	F&S	II	
CO1,CO4	Describe the Significance of sandhana kalpana, classification, Difference between Madya and Shukta Kalpana, general method of preparation, essential ingredients, Anukta Mana, Sandhana Vidhi, observations, Burnig candle test, Lime water Test, difference between Asava and Arishta, essential knowlege of sale and clinical practice , Research updates	CAP	MK	K	L_VC,PrBL	T- EW,T-OBT	F&S	II	
CO1,CO3,CO5	Explain Definition , significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krushara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Market survey of Dietary Supplements and Nutraceuticals	CAP	MK	KH	L_VC,RLE	T- EW,P-VIVA,P-EXAM	F&S	II	
Topic 8 8.Rasa Dravya Parichaya- I (Lecture :12 hours, Non lecture: 4 hours)									
CO1		CC	MK	K	L&PP	T- MEQs,P-	S	I	

	Enlist synonyms of Rasadravya and explain significance of that				T,D_L	VIVA			
CO1,CO2,CO6	Explain classical & Mineralogical identification and Sources of Rasadravyas	CC	MK	SH	L&PPT,PT	T- EW,P-EXAM	F&S	I	
CO1,CO2	Discriminate types, Grahya-Agrahyata and Dosha of Rasadravya	CC	MK	KH	L&PPT,PT	P-VIVA,TT-Theory	F&S	I	
CO1,CO2	Explain Shodhan and Marana and other processing techniques of the Rasa- Dravya.	CC	MK	KH	L_VC,IBL,D	T- EW,P-VIVA,INT	F&S	I	
CO1,CO2,CO6	Discuss probable physical, chemical changes occuring during process & after Shodhana and Marana of Parada, Haratala, Tamra and Shankha.	CC	MK	KH	L&PPT,BS,SDL	T- EW,P-VIVA,P-EXAM	F&S	I	
CO6		CC	DK	KH	DIS,B	P-VIVA	F&S	I	

	Explain research updates about Shilajatu,Naga,Mukta and Kapardika.?				S				
CO1,CO2,CO6	Discuss probable physical, chemical changes occuring after Bhavana, Puta & whole process of Bhasma nirmana from Rasadravyas	CC	MK	KH	DIS,BS	T-OBT	F&S	I	
CO1,CO4	Enlist Kalpas prepared from these Rasdravyas and therapeutic imortance of that Rasadravya	CK	DK	K	IBL,SDL	PRN	F	II	
CO2,CO3	Develop checklist for identification of genuine rasadravyas	AFT-CHR	MK	K	IBL	P-PS	F&S	III	
Topic 9 9.Rasa Dravya Parichaya II (Lecture :7 hours, Non lecture: 6 hours)									
CO1	Enlist the important synonyms of Rasadravyas	CC	DK	KH	L&PPT,DIS	P-VIVA	F&S	II	
CO1,CO6	Explain classical & Minerological identification and their Sources.	CK	DK	K	L&PPT,D_L	P-VIVA	F&S	II	

CO1	Elaborate types, Grahya-Agrahyata and Dosha of Rasadravyas	CK	DK	K	L&PPT	P-VIVA	F	II	
CO1,CO2	Explain Shodhana, Marana & and other processing techniques with probable chemical reactions.	CC	MK	KH	L&PPT,DIS,LS	T- EW,P-VIVA	F&S	II	
CO1,CO2	Explain Shodhana, Marana & and other processing techniques with probable chemical reactions.	CE	DK	K	L&GD,PT	P-VIVA	F&S	I	
CO6	Explain research updates of Kasisa,Gauripashana and Akika.	CC	DK	KH	DIS, ML	PRN	F	I	
CO1,CO5	Enlist names of rasadravyas and important kalpas prepared from respective dravya. Describe therapeutic importance of that Rasadravya.	CK	DK	K	DIS,SDL	CL-PR,M-CHT	F	II	
Topic 10 10.Rasadravya Parichaya III (Lecture :3 hours, Non lecture: 6 hours)									
CO1	Enlist Synonyms and sources.	CK	NK	K	PrBL, TPW, PER	T-OBT,M-CHT	F&S	II	

CO1,CO6	Determine types, Grahya-Agrahya, properties & classical as well as Mineralogical Identification of Rasadravyas	CC	NK	K	L&PPT,DIS,SDL	P-VIVA,CHK	F&S	II	
CO1,CO2	Explain Shodhana, Marana and Probable Chemical Changes.	CC	DK	K	L&PPT,IBL	PRN	F&S	II	
CO6	Explain research update of Badarashma.	CK	NK	K	DIS,LS	P-VIVA	F	II	
CO1,CO5	Enlist Rasadravyas from this group and describe important kalpas with their therapeutic utility	CK	DK	K	TPW	PRN	F	II	
Topic 11 11.Kalpana Nirman -III (Method of Preparation of different dosage forms) (Lecture :8 hours, Non lecture: 6 hours)									
CO1,CO2,CO3	Describe sharkara kalpana along with preparation method of Syrup.Explain therapeutic importance of prepared sharkara kalpana along with its shelf life.	CC	NK	K	L&PPT,SDL	P-VIVA	F&S	II	
CO1,CO2,CO3	Describe Gudapaka preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Gudapaka along with its shelf life.	CC	NK	K	L&PPT	P-VIVA	F&S	II	
CO1,CO2,CO3	Describe Lavana kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic	CC	DK	K	L&PPT	T-CRQs,P-VIVA	F&S	II	

	importance of prepared Lavana kalpana along with its shelf life and packaging techniques.								
CO1,CO2,CO 3	Describe Kshara kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Kshara kalpana and Ksharasutra integration with Shalya tantra department along with its shelf life and packaging techniques.	CAP	MK	KH	L&PP T	P-VIVA,TT-Theory	F&S	II	V-SHL
CO1,CO2,CO 3	Describe Ayaskriti kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Ayaskriti kalpana along with its shelf life and packaging techniques.	CC	NK	KH	L&PP T	P-VIVA	S	II	
CO1,CO2,CO 3	Describe Lepa kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Lepa kalpana, integration with Kayachikitsa and Panchakarma department along with its shelf life and packaging techniques.	CC	MK	K	L&PP T	T- EW,P-VIVA	F&S	II	V-KC ,V-PC
Topic 12 12.Chaturvidha Rasayana (Lecture :4 hours, Non lecture: 4 hours)									
CO1,CO2	Describe importance and unoque features of Chaturvidha Rasayana - Kharaliya Rasayana, Parpati Rasayana, Kupipakwa Rasayana & Pottali Rasayana.	CC	MK	KH	L&PP T,IBL	T- EW,P-VIVA	F&S	II	
CO1,CO2	Explain definition, types and method of preparation of Chaturvidha Rasayana.	CAP	MK	D	L&PP T,PT	T- EW	F&S	II	

CO1,CO2	Determine role of Yantra, Agni & Kala for pharmaceutical process of chaturvidha rasayana	CAN	DK	KH	PT	T- EW,P-VIVA	F&S	II	
CO6	Explain shelf-life of Chaturvidha Rasayana.	CAN	DK	SH	L,DIS	P-VIVA	F&S	II	
CO5	Describe chemical changes occuring during the preparation of chaturvidha rasayana and its impact on Pharmacological action of Chaturvidha Rasayana	CAN	DK	KH	L&GD,BS,SDL	CR-RED,CR-W	F	II	
CO5	Explain law of Definite proportion and proportion of Mercury and sulphur needed for preparation of sulphide of Mercury. in Chaturvidha rasayana	CAP	DK	KH	BS,IBL	CL-PR	F	II	
Topic 13 13.Current and emerging trend in Ayurvedic pharmaceuticals (Lecture :3 hours, Non lecture: 4 hours)									
CO1,CO5,CO6	**Discuss the classfication of different dosage forms.**	CK	DK	K	L&PPT,DIS	P-VIVA,M-POS	F&S	III	
CO1,CO5,CO6	Explain the need of different dosage forms.	CK	DK	K	L&PPT,DIS,SDL	P-VIVA,M-POS	F&S	III	
CO1,CO5,CO	Enlist categorical information about the cosmetics used in daily	CK	DK	K	L_VC	PRN,M-POS	F	III	

6	routine. Appreciate Ayurvedic cosmetic products.				,DIS, FV				
CO1,CO5	Appreciate Ayurvedic cosmetic products.	AFT-VAL	DK	KH	BS,Pr BL	PRN,P-SUR	F	III	
CO1,CO5,CO 6	Choose and record the contemporary machineries used in the manufacture of cosmetics.	CK	NK	K	L_VC ,DIS, SDL	M-POS	F	III	
CO1,CO5,CO 6	Enlist Quality Control parameters of cosmetics preparations.	CK	DK	K	L&PP T,DIS	P-VIVA,M-POS	F&S	III	
Topic 14 14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs (Lecture :2 hours, Non lecture: 4 hours)									
CO5	Explain the legal and regulatory aspects of manufacturing, and sale of Ayurvedic drugs.	CC	MK	K	L&PP T,IBL	CL-PR	F&S	III	
CO5	Describe acts and rules mentioned in Drug & Cosmetic Act 1940 & Rule 1945 and their relevance to Ayurvedic, Siddha, Unani (ASU) drugs.	CC	MK	K	L&G D,BS	QZ	F&S	III	H-DG
CO5	Discuss the guidelines of Food Safety and Standards Authority of India (FSSAI) and FDA.	CK	DK	K	L&G D,SD L	CL-PR	F	III	
CO3,CO5	Determine the principles and practice of establishment of Ayurvedic pharmacy.	CK	DK	K	L&G D,TP W	P-EN,CL-PR	F	III	
CO5	Discuss the NABL guidelines for testing laboratory (Chemical).	CK	NK	K	L&PP T,D_	CL-PR,CHK	F&S	III	

					L				
CO1,CO5	Explain long forms of these - (FSSAI) and (FDA),(CCRAS),(DCGI), (CDSCO)	CK	DK	K	L	T-EMI	S	III	
CO4	Discuss ethical aspect of large scale drug preparation in Ayurvedic Pharmacies	AFT-VAL	DK	K	DIS	CL-PR	F	III	

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1.Aushadhi Prayoga Vigyana (Lecture :1 hours, Non lecture: 2 hours)									
CO1	Define Aushadhi Prayoga Vigyana and its scope and enlist prashasta bheshaja laxana	CK	MK	K	L	TT-Theory	F&S	I	
Topic 2 2.Single drug (Herbal & Mineral) (Lecture :8 hours, Non lecture: 2 hours)									
CO1,CO2,CO4,CO5,CO6	Describe different dosage forms prepared out of a single herb or mineral	CK	MK	KH	L_VC	P-VIVA,COM,TT-Theory	F&S	I	
CO1,CO2,CO4,CO5,CO6	Appreciate how the therapeutic efficacy varies depending on the dosage form	AFT-VAL	MK	K	L&PPT	T- EW,DEB	F&S	I	

CO1,CO2,CO4,CO5,CO6	Describe therapeutic efficacy of different formulations of Vishadrvya (Bhallataka), with its toxic effects and remedy.	CK	NK	K	L&GD	P-VIVA	F	I	
CO1,CO5	Describe therapeutic efficacy of different formulations of Guduchi, Gairika, Gandhaka	CC	MK	K	L&GD,PER	P-VIVA,TT-Theory	F&S	III	
CO3,CO4	Aappraise multiple factors considered for preparation of various dosage forms from a single drug and creat list of more such examples.	AFT-CHR	DK	KH	BS,IBL	COM	F	III	
Topic 3 3.Single drug(Bhasma, Shuddha & Pishti) (Lecture :12 hours, Non lecture: 6 hours)									
CO2,CO6	Explain chemical form/composition, Pharmacodynamics and pharmacokinetics of Abhraka, Loha and Godanti Bhasma.	CC	DK	KH	L&PPT,DIS,IBL	P-VIVA	S	III	
CO1,CO2	Explain therapeutic properties, dosage, Anupana, Pathyapathya, duration of treatment, Sevana Kala, shelf life, important Yogas of each Bhasma.	CC	MK	KH	L&PPT,TPW	T- EW,P-VIVA	F&S	III	
CO1,CO2	Describe Apakwa Ashuddha Avidhi Bhasma Sevanajanya Vyadhi and their Shanti-upaya.	CK	DK	KH	DIS,BS	P-VIVA,TT-Theory	F	III	
CO1,CO2	Describe in detail Amayika Prayoga (Therapeutic uses) of each Bhasma/Pishti with given references.	CAP	MK	SH	L&GD,W	T- EW,P-VIVA	F&S	III	

CO2,CO6	Explain research updates and clinical evidences of Swarna Bhasma, Makshika Bhasma and Shankha Bhasma.	CE	DK	K	PrBL, SDL	PRN	F&S	III	
Topic 4 4.Aushadhi Kalpa -I (Compound formulations) (Lecture :16 hours, Non lecture: 4 hours)									
CO1,CO2	Describe reference, ingredients, therapeutic properties, dosage and all administration details alongwith Anupana of each formulation.	CK	MK	KH	L&PPT,BS, SDL	T- EW,P-VIVA	F&S	III	
CO1,CO2	Explain Pathya Apathya, Sevana Avadhi (duration of treatment) and shelf-life of each formulation.	CC	MK	KH	L&PPT,DIS,BS	T- EW	F&S	III	
CO1,CO2	Interpret probable mode of action of each formulation as per Ayurveda.	CC	DK	KH	L&GD,BS	T- EW,P-VIVA	F&S	III	
CO2,CO3,CO6	Explain research updates and clinical evidences of Arogyavardhini Gutika and Gandhaka Rasayana	CE	DK	K	PrBL	P-VIVA	F&S	III	

CO3,CO4	Critically analyse compound drugs for their therapeutic actions mentiond in the classics.	AFT-VAL	DK	KH	IBL	PRN	F	III	
Topic 5 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) (Lecture :14 hours, Non lecture: 2 hours)									
CO1,CO2,CO3,CO4	Describe Ingredients, therapeutic importance, dose, anupana, pathya-pathya, duration of treatment, sevana kala, shelf life, research updates and clinical evidences of Dashamoola Kwatha, Pushyanuga Churna, Sanjivani Vati, Chitrakadi Gutika, Simhanada Guggulu, Yogaraja Guggulu, Chyavanaprashavaleha, Gandhakadya Malahara, Ashokarishta, Kutajarishta, Panchagavya Ghrita, Bilvadi Gutika.	CAP	MK	KH	L&PPT	T- EW,P-VIVA	F&S	III	
CO1,CO2,CO3,CO4	Describe Ingredients, indications, dose, anupana, pathyapathya, duration of treatment, sevana kala, shelf life, and clinical evidences of Mahamanjistadi kwatha, Sudarshana Churna, Vyoshadi Vati, Bala Chaturbhadra Rasa, Lavana Bhaskara Churna, Narayana Taila,, Neeliringadi Taila Aravindasava, Kumaryasava.	CAP	NK	KH	L&PPT,DIS	P-VIVA	S	III	
CO1,CO2,CO4,CO5	Describe Ingredients, indications, dose, anupana, pathyapathya, duration of treatment, sevana kala, shelf life, and clinical evidences of Panchaguna Taila, Dadimavaleha, Bramhi Ghrita	CK	DK	K	L&PPT	P-VIVA,TT-Theory	S	III	
CO1,CO2,CO3	Undersand & Recite following classical kalpas.Describe Amayika prayoga of each formulation.Understand probable mode of action as per AyurvedaSearch and Record relevant reaserch articles.Create charts describing details of these drugs.Review market avaibality & poplularities of these drugs among practicing vaidyas & near by population.	CAP	MK	KH	L&PPT,DIS,BS,IBL,PBL	P-EXAM,COM,TT-Theory	F&S	III	V-KC,V-SH,V-PC,V-SHL,V-SP,V-BL

CO3,CO4	Explain ethical aspect of administration of compound drugs mainly regarding duration of the treatment given.	AFT-VAL	DK	K	PBL	CL-PR	F	III	
CO1,CO2,CO4,CO6	Describe ingredients, with its dose, therapeutic importance, anupana and pathya-apathya along with its clinical evidences and Research upadates	CK	MK	KH	L&PPT	T- EW,P-VIVA	F&S	III	
CO1,CO2,CO4,CO6	Enlist the formulations with its dose, anupana and indications	CK	NK	K	L	T-EMI	S	III	
Topic 6 6.Dosage Forms & Cosmetic Products (Lecture :5 hours, Non lecture: 2 hours)									
CO2,CO3,CO7	Define the term- Dosage forms.	CK	MK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Discuss the need of different dosage forms.	CK	MK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Explain the classification of different dosage forms.	CK	DK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Enlist the solid / liquid / semisolid dosage forms.	CK	MK	K	L&PPT	T-EMI	F&S	III	
CO2,CO3,CO7	Discuss the routes of administration of different dosage forms.	CK	MK	K	L&PPT	T- EW	F&S	III	
CO2,CO3,CO7	Describe the advantages and disadvantages of currently available dosage forms.	CK	MK	K	L&PPT	TT-Theory	F&S	III	
CO2,CO3,CO7	Discuss the research updates about modification of classical Ayurvedic dosage forms.	CK	DK	K	L&PPT	CL-PR	F	III	
CO2,CO3,CO7	Discuss the relevant case studies of different dosage forms.	CK	NK	K	L&PPT	P-SUR	F	III	

CO2,CO3,CO7	Define the term Cosmetics.	CK	DK	K	L	TT-Theory	F&S	III	
CO2,CO3,CO7	Explain the classification of cosmetics based on their application on the specific body parts.	CK	DK	K	L&PPT	CL-PR	F&S	III	
CO2,CO3,CO7	Differentiate between the ancient cosmetics and modern day cosmetics.	CK	DK	K	L&PPT	TT-Theory	F&S	II	
CO5	compare and appraise herbal cosmetics vs synthetic products	AFT-VAL	DK	KH	PBL	PRN	F	III	
Topic 7 7.Nutraceuticals (Lecture :6 hours, Non lecture: 1 hours)									
CO1	Describe importance of combination of aahara and aushadha	CK	MK	K	L&PPT	T- EW	F&S	III	H-SW
CO2,CO6	Explain Nutraceuticals with its types	CK	MK	K	L&PPT	TT-Theory	F&S	III	H-SW
CO2,CO6	Corelate rasayana and nutrceutical with examples	CAN	DK	KH	DIS,PrBL	T-OBT	F	III	H-SW
CO2	Describe with examples mode of action of Ayurvedic nutraceuticals	CAP	MK	KH	SDL, LS	PRN	F	III	H-Samhita, H-SW
CO2,CO6,CO7	Enlist at least two dietery preparations from Ayurvedic classics which can serve as rasayana/ nutraceutical in-1) General Health2) Pediatric Health3) Geriatric Health4) Women(Garbhini/ Sutika) Health5) Cardio-protection6) Chronic illness-recovery stage	CAP	MK	K	DIS,BS,SY	CL-PR	F	III	H-SW
CO1,CO2,CO6,CO7	Describe potential of Ayurvedic diet and Rasayana in sports endeavor	CAP	DK	KH	BS,PrBL,PS	DEB	F	III	H-SW

					M				
CO7	Explain research updates about nutraceuticals	CK	NK	K	SDL, PL	M-POS	F	III	
CO2	Enlist atleast two examples of Aushadhi siddha aahara with its indications for each category-->(Aharadravya belonging to following category and kalpa prepared from that aahara dravya and other aushadhi ingredients)1) Jala varga2) Dugdha varga3) Ikshu varga4) Suka-dhanya varga5) Shimbi Dhanya Varga6) Shaka Varga7) Phala Varga8) Lavana Varga9) Spices	CC	DK	K	L&GD,PrBL	CL-PR	F	III	H-Samhita, H-SW
CO3,CO4	creat list of unique features of Ayurvedic neutraceuticals and appraise their current need	AFT-VAL	DK	KH	DIS	PRN	F	III	
Topic 8 8.Anupana Prayoga for Aushadhi Kalpa (Lecture :4 hours, Non lecture: 1 hours)									
CO1	Define and classify Anupana and Sahapana	CK	MK	K	L	T- EW	F&S	III	
CO1,CO2	Expalin different factors to be considered for selection of Anupana as per Disease and Patients	CC	MK	KH	L	T- EW	F&S	III	
CO1,CO2	Enlist different anupana for a single drug based on the condtion of patient and disease. Elaborate with the help of examples of kalpas.	CC	MK	KH	L	T- EW	S	III	
CO4	Describe value of proper selection of Anupanas with examples	AFT-VAL	DK	K	SDL	M-CHT	F	III	
Topic 9 9.Aushadhi Prayoga Marga (Lecture :5 hours, Non lecture: 1 hours)									
CO2,CO4	Discuss the various types of Aushadhi Prayog Marga (route of drug administration).	CK	MK	K	L&PPT	T- EW	F&S	II	
CO2,CO4	Describe the advantages and disadvantages of each Aushadhi Prayog Marga.	CK	DK	K	L&PPT,BS	P-SUR,PM,TT-Theory	F&S	II	

CO2,CO4	Enlist the dosage forms used in the specific Aushadhi Prayog Marga.	CK	DK	K	L&PPT	T-EMI	F&S	II	
CO2	Discuss the nature of drug (s) administered in various routes of drug administration.	CAP	NK	KH	L&GD	CL-PR	F	II	
CO4,CO5	Appraise administration of drugs through various routes mentioned in Ayurvedic treatment	AFT-VAL	MK	K	L&GD	T- EW	F&S	III	
Topic 10 10.Rational prescription along with safe dispensing of Ayurvedic formulations. (Lecture :1 hours, Non lecture: 4 hours)									
CO2,CO4	Describe and write demo ideal prescription.	CAP	MK	SH	L&GD,CBL	CR-W,CHK	F&S	III	V-KC,V-SP,V-BL
CO1,CO3,CO4	Explain the safe dispensing and efficacious use of Ayurvedic drugs.	CAP	MK	KH	L&GD,BS,TPW	T-CS,PM	F&S	III	V-KC,V-BL
CO2,CO4	Explain the importance of rational prescribing of drugs and the concept of essential drugs.	CK	DK	K	L&GD,IBL	QZ ,CHK	F	III	V-KC
CO2,CO4,CO5	Describe the standard protocol for safe dispensing of Ayurvedic drugs.	CK	DK	KH	L&GD	T-OBT	F	III	
CO2,CO4	Demonstrate and educate home remedies to small group of population.	CAP	DK	SH	PrBL,TPW	TR	F	III	H-SW
CO5	explain ethical aspects related to prescription writting	AFT-RES	MK	KH	TPW	INT	F	III	
Topic 11 11.Traditional & Local health Practices (Lecture :2 hours, Non lecture: 4 hours)									
CO1	Identify Local Health Traditions and Healing Knowledge,	CC	DK	K	DIS,PrBL	P-SUR,INT	F	III	

CO1,CO5	Recognise the possible potential of product development and research based on Traditional knowledge	CK	DK	KH	IBL	INT	F	III	
CO1,CO4	Identify the factors responsible for grant of patent and erroneus grant of patent on indian traditional knowledge.?	CK	DK	K	BS	INT	F&S	III	
CO5	Appraise traditional knowlege of Ayurvedic medicines	AFT-VAL	DK	K	TPW	CR-W	F	III	
Topic 12 12.Pharmacovigilance for Ayurveda drugs (Lecture :1 hours, Non lecture: 4 hours)									
CO2,CO4,CO5	Describe the term Pharmacovigilance and explain importance of Pharmacovigilance for Ayurvedic drugs.	CK	DK	K	L&PPT,IBL	M-POS,C-INT,RK	F	III	V-KC,V-BL,H-DG,H-AT
CO4,CO5	Explain the status and central sector scheme of Pharmacovigilance for Ayurveda, Siddha, Unani, and Homeopathy (ASU & H) drugs.	CK	MK	K	L&PPT,DIS	INT,TT-Theory	F	III	V-KC,H-DG,H-AT
CO4,CO5	Define Adverse Drug Reactions (ADR) and its types.	CE	DK	K	L&GD,IBL	QZ ,TT-Theory,VV-Viva	S	III	V-KC,V-BL,H-DG,H-AT
CO2,CO4,CO5	Identify and monitor ADRs.	AFT-VAL	DK	KH	L&GD,BS,IBL	PRN,RK	F	III	V-KC,V-BL,H-DG,H-AT

CO2,CO4	Discuss and make critical comments on the safe and efficacious use of Ayurvedic drugs.	CAP	DK	KH	L&GD,PrBL,TUT	QZ ,CL-PR,INT	F	III	V-KC ,H-DG,H-AT
CO4,CO5	Debate on ADR of ASU drugs	AFT-RES	DK	K	DIS	DEB	F	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	1.Paribhasha concept based Practicals	1	20
2	2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals	1	24
3	3.Rasa Dravya Aushadhi Nirmana Practicals	1	20
4	4.Bheshaja Kalpana Practicals -I	2	24
5	5.Bheshaja Kalpana Practicals -II	2	22
6	6.Dosage Forms & Self-care Products Practicals	2	22
7	7.Field Visit/ Study Tour	3	24
8	8.Hospital IPD Practical	3	10
9	9. Drug Dispensing Practical	3	6
10	10.Quality Control Practicals	2	38

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 1.Paribhasha concept based Practicals									
CO1	Identify the drugs and recite classical name,English name and chemical composition and varga(class) Recite Maharasa , uparasa, Sadharana rasa shlokas from Rasaratna samuchchaya.	PSY-SET	MK	KH	GBL, REC	P-VIVA,P-ID	F&S	I	
CO1,CO2	Demonstrate the correct procedure / SOP and assess the changes observed after the procedure.Discuss the relevant samskara and its role in that procedure.Interpret the Physical, Chemical and Biological alterations.	PSY-MEC	MK	D	GBL, PT	P-PRF,CHK,OSPE	S	I	
CO1,CO2	Observe and describe the pharmaceutical preparation of Gandhaka druti. Explain the term alotropism.Recite melting, boiling and evaporating temparature of Gandhaka.	PSY-MEC	DK	KH	DIS,D_L	P-VIVA	S	II	
CO1,CO2	Observe the procedure of Vanga Jarana. Explain the difference between Jarana and Jaranaa. Discuss chemical process of oxidation and reduction. Recall the information about melting points of all the metals.	CAP	DK	KH	PT,D	P-VIVA	S	III	
CO1,CO2	Demonstrate preparation of Kajjali. Recite its classical shloka. Prepare a checklist of parameters for its siddhilakshana. Interpret	PSY-MEC	MK	D	PBL, TPW,	P-REC,P-EXAM,P-PS	F&S	I	

	law of definite proportion to explain and calculate amount of free sulfur in the prepared amount of kajjali. Calculate the expected weight of rasasindura from the given amount of kajjali.				D_L				
CO1,CO2	Identify relevent Bhasmapariksha and demostrate samanya and vishesha Bhasma pariksha. Interpret physical/ chemical laws relevant to classical bhasma pariksha.	PSY-MEC	MK	D	DIS,GBL,LRI,DA,D_L	P-VIVA,CHK	F&S	I	
CO1	Identify various weights and recite essential measures from conversion chart of AFI. Recognise weighing machines and their weighing capacity.	CAP	DK	KH	BS,PrBL,TPW,PL	PRN,P-SUR	F	I	
CO3,CO4	Identify and value SOP of each procedure of the practical conduceted.	AFT-VAL	MK	KH	D_L	P-EXAM	S	II	
CO2	Appraise ancient indications mentioned in classics for confirmation of end point of the pharmaceutical process(Siddhi lakshana)	AFT-RES	MK	K	PrBL	P-VIVA	S	III	
Topic 2 2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals									
CO1,CO2	Recall, Identify and authenticate the raw materials required as per the dosge form/ formulations	PSY-SET	MK	KH	DIS,D	P-VIVA	F&S	II	
CO1,CO2	Demonstrate the method of preparation to get the desired dosage form following SOP	PSY-MEC	MK	SH	DIS,PT	P-VIVA,P-EXAM	F&S	II	
CO1,CO2,CO5	Assess and explain different parameters to achieve desired characters/ end points (siddhi lakshana) as per classical and contemporary parameters	PSY-MEC	MK	KH	DIS,D	P-VIVA,P-EXAM	F&S	II	
CO1,CO2	Describe ethical responsibility expected during Pharmaceutical	AFT-	MK	K	SDL	P-PRF	F&S	III	

	preparation of Ayurvedic Formulations	REC							
Topic 3 3.Rasa Dravya Aushadhi Nirmana Practicals									
CO1,CO2,CO3	Explain reference Shloka of kalpas & write with interpretation -list of ingredients, their proportion, principles of yoga - yoga samyojana dravya	CC	MK	KH	L	P-VIVA,P-EXAM	F&S	I	
CO1,CO2,CO3	Identify raw Dravya ,used part with classical Mana and interpret in metric system....	CAP	MK	D	DIS,BS	P-EXAM	F&S	I	
CO2,CO3	Identify, Utilize & know mechanism of Yantra used for drug preparation	CAP	MK	KH	DIS,BS	VV-Viva	F&S	I	
CO2,CO3	Observe & Record various parameters responsible for good manufacturing which are done during process of phamaceutical preparation	CE	MK	SH	DIS,BS,PT	P-EXAM	F	I	
CO2	Demonstrate Sidhdhi Lakshna	CAP	MK	SH	D	P-VIVA	S	III	
CO2,CO3	Assess finished product as per classics.	CE	MK	SH	DIS,PT	P-VIVA,P-EXAM	S	I	
CO1,CO2,CO	Appraise peculiarities of chaturvidha rasayana preparation	AFT-	DK	KH	PER	M-POS	F	III	

4		VAL							
Topic 4 4.Bheshaja Kalpana Practicals -I									
CO1,CO3	Demonstrate Arka preparation method, along with its packaging technique and therapeutic importance.	PSY-SET	MK	SH	DIS,D-M	P-VIVA,P-EXAM	F&S	II	
CO1,CO3	Demonstrate prepration of Vati along with drying techniques	PSY-MEC	MK	KH	DIS,D	P-VIVA,P-EXAM	F&S	II	
CO1,CO3	Identify the genuine sample of Guggulu and demonstrate preparation of different types of Guggulu along with drying techniques	PSY-SET	MK	K	DIS,PT	P-VIVA,P-EXAM	F&S	II	
CO1,CO3	Identify the useful part of the raw material and demonstrate Sattva preparation method.	PSY-SET	MK	K	DIS,D	P-VIVA,P-EXAM	F	II	
CO1,CO3	Demonstrate prepration of Varti along with drying and packaging techniques.	PSY-SET	MK	KH	PT	P-VIVA,P-EXAM	F	II	
CO1,CO3	Demonstrate Lavana preparation methods, along with its packaging techniques.	PSY-SET	DK	SH	PT	P-VIVA,P-EXAM	F	II	
CO1,CO3	Identify the internal and external applications of different kshara kalpana along with importance of ksharasutra through surgical aspects.	PSY-ADT	MK	K	PT	P-VIVA,P-EXAM	F	II	V-SHL
CO1,CO3	Demonstrate and Explain preparation methods of Masi kalpana for its internal or external application in clinical practice.	PSY-ADT	DK	K	DIS,PT	P-VIVA,P-EXAM	F	II	
CO1,CO3	Demonstrate preparation and application aspects of Upanaha kalpana .	PSY-MEC	DK	K	DIS,PT	P-EXAM	F&S	II	V-KC
CO1,CO3	Demonstrate preparations of Sikta taila along with identify the genuine sample of Sikta.Perform and Describe Malahara kalpana preparation method with its confirmatory tests of end point. .	PSY-SET	DK	K	DIS,PT	P-VIVA,P-EXAM	F&S	II	

CO2,CO3	Demonstrate preparation of different types of Malahara with its applied aspect.	PSY-SET	NK	K	PT	P-SUR	F	II	V-KC
CO2,CO3	Demonstrate preparation of different types of Lepa and preparation of Shatadhouta ghrita .	PSY-SET	NK	KH	DIS,PT	PRN	F	II	V-KC ,V-PC
CO2,CO3	Perform and Describe Lepa kalpana preparation method with its confirmatory tests and precautionsExplain therapeutic importance of prepared Lepa kalpana, integration with Kayachikitsa and Panchakarma department along with its shelf life and packaging techniques.	PSY-MEC	DK	SH	L&GD	P-VIVA,P-EXAM	F&S	II	V-KC
CO2,CO3	Observe demonstration of formulation of Danta manjana	CAP	NK	KH	L&GD	PRN	F	II	
Topic 5 5.Bheshaja Kalpana Practicals -II									
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Ghrita Murchana and Taila Murchana	PSY-MEC	MK	D	PT,D	P-REC,P-EXAM,OSPE	F&S	II	
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Jatyadi Gritha/ Triphala Gritha/ Ksheera Shatphala Gritha/Phala Gritha,	PSY-MEC	MK	D	PT,D	P-EXAM,OSPE	F&S	II	
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage Ksheera Bala Taila/Kasisadi Taila/ Panchaguna Taila/ Arka Taila/Kutajasuryapaki taila	PSY-MEC	MK	SH	D	P-EXAM,OSPE	F&S	II	

CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage Bhallataka Taila Patana/ Jayapala Taila Patana/Vishvamitra Kalpa Sneha	PSY-MEC	DK	KH	D	P-VIVA,P-EXAM,OSPE	F	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Vasavaleha/ Chavana Prasha Avaleha/ Kushmanda Avaleha	PSY-MEC	MK	KH	D	P-VIVA,P-REC,P-EXAM	F&S	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Nimbu Sharkara	PSY-MEC	NK	SH	D	P-EXAM,OSPE	F	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Daruharidra Rasakriya	PSY-MEC	NK	SH	D	PRN	F	II	
CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Haridra Khanda/ Narikela Khanada	PSY-MEC	MK	D	D	P-VIVA,P-EXAM,OSPE	F&S	II	
CO1	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the	PSY-MEC	MK	KH	D	T- EW,P-VIVA	F&S	II	

	Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Kumaryasava/Drakshasava								
CO1,CO2	Demonstrae the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlisting the results, packing and storage of Kutajarista/Ashokarishta/Takrarishta	PSY-MEC	MK	KH	D	P-VIVA	F&S	II	
CO2	. Demonstrate the SoP involved in the drug selection, measuring the appropriate quantity of ingredients, preparation, observe the Physical Changes, Siddhi lakshana, enlist the results, packing techniques and storage of unique formulations for e.g.Kanji/ Madushukta	CC	DK	KH	D	P-VIVA,COM	F&S	II	
Topic 6 6.Dosage Forms & Self-care Products Practicals									
CO1,CO2,CO6	Observe instruments used to prepare soliddosage form, liquid dosage form and Semisolid Dosage Form with one example for each , their method of preparation, ingredients used with their quantity and Quality control Parameters.	AFT-RES	DK	KH	W,PT,D	P-VIVA,CHK	F&S	III	
CO1,CO2,CO6	Observe instruments used to prepare with one example for each , their method of preparation, ingredients used with their quantityand Quality control Parameters.of following self care productsHair care: Shampoo Body care :Soap, Perfume Face care : Face Pack/Talcum Powder Lip Care : Lip Balm, Lipstick Oral care: Tooth Paste/ Mouth Wash Foot Care: Foot Cream Hand Disinfectant : Hand SanitizerSkin Care: Moisturizer, Sunscreen Lotion following self care products	PSY-ADT	DK	KH	L_VC,PT,D	P-VIVA,P-EXAM,CHK	F&S	III	
Topic 7 7.Field Visit/ Study Tour									
CO1,CO3,CO4,CO5,CO6	Field Visit - Record the storage condition of the raw / in-process	CK	DK	K	DIS,FV	M-POS,COM	F	III	

	/ finished goods prepared in the approved sections.								
CO1,CO3,CO4,CO5,CO6	Determine the role of various Yantras / machineries used in the approved sections of the Pharmacy	CK	DK	KH	DIS,RLE	INT	F	III	
CO1,CO3,CO4,CO5,CO6	Differentiate between the ancient and contemporary methods of drug preparation.	CC	DK	K	DIS,FV	PRN	F	III	
CO1,CO3,CO4,CO5,CO6	Enlist the documents required in Batch Manufacturing of Ayurvedic medicines.	CK	NK	K	DIS	P-SUR	F	III	
CO1,CO3,CO4,CO5,CO6	Identify the role of Quality Control instruments and equipments in ensuring a quality Ayurvedic product.	CK	DK	K	L&PPT,DIS	DEB	F	III	
CO1,CO3,CO4,CO5,CO6	Appreciate the importance of Good Manufacturing Practices and Good Packaging Practices required in Ayurvedic Drug manufacturing.	AFT-VAL	DK	K	DIS	PRN,DEB	F	III	
CO1,CO3,CO4,CO5,CO6	Prepare own products as per prevalent FDA guidelines.	PSY-GUD	DK	D	L_VC,DIS	P-EXAM	F	III	
Topic 8 8.Hospital IPD Practical									
CO1,CO2,CO3,CO4	Review & Observe the case Sheets.	CC	NK	KH	DIS	P-SUR	F	III	V-KC,V-SH,V-PC,V-SHL,V-S

									P,V-BL
CO1,CO2	Discuss for formulation prescription manner.	CC	DK	KH	L&GD	T-CS	F&S	III	V-KC
CO1,CO2,CO3	Demonstrate & Explain prescription method.	CAP	DK	SH	CD	P-PS	F&S	III	V-KC
CO1,CO2,CO4	Measure dose of prescribed drug.	CAP	MK	KH	PrBL	SP	F	III	
CO1,CO2,CO3	Enlist Time, Duration, Pathya, Apathya while prescribing drugs.	CAP	DK	KH	L&GD	P-PRF	F	III	
CO4,CO5	value details and methodical writting of case records of hospital IPD patients	AFT-VAL	MK	KH	RLE	P-CASE	F	III	
Topic 9 9. Drug Dispensing Practical									
CO1,CO3	Assess the arrangement of Ayurvedic drugs according to nature and type in dispensing room or pharmacy.	CAP	NK	D	RLE	P-PRF	F	III	V-KC,V-PC,V-BL
CO1,CO3,CO4	Assess practice of prescription processing and labelling of the drugs.	CE	DK	KH	PrBL	INT	F	III	
CO3,CO4	Determine and identify the cause of common errors occurred	CC	DK	KH	RLE	CL-PR	F	III	

	during dispensing of Ayurvedic drugs.								
CO2,CO4	Explain use of correct drug supply to the right patients, in the required dosage, quantities and clear drug information.	CAP	DK	SH	L&G D	PRN	F	III	V-KC ,V-BL
Topic 10 10.Quality Control Practicals									
CO2	Develop analytical skills for understanding Identity, Purity and Strength of raw materials and finished products as per the standard guideines of the Ayurvedic Pharmacopoeia of India.	CK	MK	KH	L&G D,BS, W,PT, D_L	P-VIVA	F	II	
CO2,CO5	Identify the geological description of minerals: physical parameters.	CK	DK	K	L_VC ,W,D _L,FV	P-ID	F&S	II	
CO2	Describe ayurvedic perspectives of quality control parameters applying for solid, semisolid and liquid dosage forms.	CAP	MK	SH	L&G D,TU T,DA	P-VIVA,Log book	F&S	II	
CO2,CO5	Demonstrate the calibration techniques used for Weighing Balance (chemical and physical), pH Meter, Hot Air Oven and Electric Muffle Furnace to ensure the accuracy of the instrument what it is intended to measure.	CC	DK	KH	D_L	P-VIVA,PRN	F	II	
CO2		CAP	MK	SH	PT,D	P-EXAM,Log	F	II	

	Demonstrate bulk density, loss on drying, total ash, pH and water soluble extractives of Churna.				A	book			
CO2	Perform the analytical tests of tablets/ vati/ gutika for hardness, uniformity of weight and friability.	AFT-CHR	MK	SH	PT,DA	P-EXAM,Log book	F&S	II	
CO2	Estimate specific gravity, alcohol content and total solids of Asava & Arishta.	AFT-CHR	MK	SH	PT	P-EXAM,P-PRF	F	II	
CO2,CO5	Determine iodine value, acid value and saponification value of oils / ghee.	CAP	MK	KH	D_L	P-VIVA	F&S	II	
CO2,CO3	Calculate the dose of various dosage forms and their dispensing methods.	CE	MK	SH	L&GD,PrBL,BL,RLE,D_L	P-SUR,P-CASE	F&S	II	
CO4,CO5	Appraise quality control procedures done for Ayurvedic formulations	AFT-VAL	DK	K	DIS	CL-PR	F	III	

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1.Paribhasha concept basedPracticals	1	**A) Dravya Paribhasha-** Identification of drugs and their respective class (varga) **B) Prakriya Paribhasha-** **1.Swedana:** Godanti Shodhana (A.F.I.-1,18:4 (Rasatarangini 11/238) Shankha Shodhana (A.F.I.-1,18:18(Rasatarangini 12/12/2) Kapardika shodhana (Rasatarangini 12/89) Guggulu Shodhana (Rasendra Sara Sangraha 1/386, Pg. 117 **2. Mardana**:Parada Samanya Shodhana (Ayurveda Prakasha 1/165) **3. Dhalana :** Gandhaka Shodhana (A.F.I. 2 Parishishta - 2,9 Shodhana(Rasamrita 2, 3) Vanga Shodhana (A.F.I.-1,18:15 (Sharangadhara M.11/2) Yashada shodhana (Rasatarangini 19/99) **4. Nirvapa**: Abhraka Shodhana (A.F.I.-1,18:1 (Rasatarangini 10/20) Tamra Shodhana (A.F.I.-1,18:5 (Ayurveda Prakasha 3/118) **5. Nirjaleekarana :** Tankana Shodhana (A.F.I. 2 Parishishta -2,15 Shodhana (Ayurveda Prakasha 2/244) Kankshi shodhana (A.F.I.-2, 14:3 (Ayurveda Prakasha 2 /258) **6. Bhavana:** Hingula Shodhana (A.F.I. 2 Parishishta - 2 Shodhana (Rasamruta 1/54) **7. Bharjana:** Gairika Shodhana (A.F.I. 2 Parishishta - 2,11 Shodhana (Rasaratna Samuchchaya 3/49) Hingu Shodhana (Bhavprakash Nighantu, Haritakyadi Varga, 1/101, Pg. 42) **8. Nimajjana/Sthapana:** Vatsanabha shodhana (A.F.I. 2 Parishishta - 2,25 Shodhana (Rasamrita parishishta 8:145) 9. Jarana : Vanga Jaran (Ayurved Prakash 3/159) Vanga Bhasma (A.F.I.-1,18:15 (Rasamruta 3/94) **10. Murchana:** Mugdha Rasa (Rasatarangini 6/9) Kajjali (A.F.I.- 1 Parishishta-1, Paribhasha 21 (Rasatarangini 2/27) **11. Druti-** Gandhaka Druti(Rasa Ratna Samuchchaya 3/29) **C) Pramanikarana Paribhasha-**	20

			1) Bhasma Samanya Pareeksha **-** Abhraka Bhasma (Ayurved Prakash 2/104) Shankha Bhasma (Rasaratnasamucchaya 8/26-30) **2) Bhasma Vishesha Pareeksha:** Tamra Bhasma (Dadhi/ Nimbu Pariksha)-(Bhaishajya Kalpana Vigyan, Vd. Siddhinandan Mishra, Pg. 78) **D) Namburi Phased Spot Test (NPST)**	
2	2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals	1	**1.Swarasa Kalpana:**Tulasi swarasa (Sharangdhar Samhita Madhyam Khanda 1/2),Ardraka Swarasa (Sharangdhar Samhita Madhyam Khanda 1/2), Vasaputapaka Swarasa (Sharangdhar Samhita Madhyam Khanda 1/22-23 & 34) **2. Kalka Kalpana:** Nimba kalka (Sharangdhar Samhita Madhyam Khanda 5/1),Rasona Kalka (Sharangdhar Samhita Madhyam Khanda 5/1) **3. Kwatha Kalpana:** Punarnavashtaka kwatha (Sharangdhar Samhita Madhyam Khanda 2/1-2, 78-79), Rasna Saptaka Kwatha (Sharangdhar Samhita Madhyam Khanda 2/1-2, 88-89) **4. Hima Kalpana:**Dhanyaka Hima (Sharangdhar Samhita Madhyam Khanda 4/1, 7-8),Sarivadi Hima **5. Phanta Kalpana:**Panchakola phanta (Sharangdhar Samhita Madhyam Khanda 3/1-2),Yashtimadhu phanta (AFI 1 Parishishta – 1,2/5 Paribhasha) **6. Churna Kalpana:**Sitopaladi churna (AFI Part 1, Vol. 1 A, Pg. 348), Hingwastaka Churna (AFI Part 1, Vol. 1 A, Pg. 353) **7. Pramathya:**Mustadi Pramathya (Sharangdhar Samhita Madhyam Khanda 2/ 152-153) **8. Paneeya Kalpana:** Shadanga Paneeya (Sharangdhar Samhita Madhyam Khanda 2/ 159-160) **9. Mantha Kalpana:** Kharjuradi Mantha (Sharangdhar Samhita Madhyam Khanda 3/9-10) **10. Panaka Kalpana:** Chincha Panaka (Bhaishajya Ratnavali Arochaka 18/34-35), Chandana Panaka **11. Ksheerapaka Kalpana**: (Sharangdhar	24

			Samhita Madhyam Khanda 2/175-176), Arjuna Ksheera Paka - Chakradatta, Lashuna Ksheerapaka - Charaka Chikitsasthana 5/95 **12. Udaka Kalpana :** Tandulodaka (Sharangdhar Samhita Madhyam Khanda 1/28) Note: In each category if more than 1 practical are there any one or all may be performed.	
3	3.Rasa Dravya Aushadhi Nirmana Practicals	1	**1. Marana :**Vanga Bhasma (A.F.I. - I, Bhasma, 18:15, Rasatarangini Taranga) / Sankha Bhasma:A.F.I. - I, Bhasma, 18:18, Rasatarangini taranga 12/2) **2. Kharaliyarasayana :**Ananda Bhairava Rasa(A.F.I. - I, Rasayoga, 20:3, Rasendrasarasangraha Jwaradhikara 2/103-105) /, Tribhuvana Keerti rasa(A.F.I. - I, Rasayoga, 20:20, rasamrita 9/80-81) **3. Parpati :** Rasa Parpati(A.F.I. - I, Parpati, 16:3, Bhaishajyaratnavali grahanirogadhikara 414-416&436-440), Sweta Parpati(A.F.I. - II, Parpati, 12:2, siddhyogsangraha ashmarimutrakruchhaadhikara) **4. Kupipakwarasayana :** Rasasindhura(A.F.I. - I, Kupipakwa Rasayana, 15:6, rasatarangini taranga 6/162-176) **5.Pottalirasayana :**Rasagarbhapottali (Rasayogsagar dwitiyabhaga pottali rahasya page 582) **6. Rasa :** Laghusutsekhararasa (Rasatantrasara avum siddhaprayogsangraha part-1, kharaliya rasayana page 274) **7. Loha:** Navayasa loha(A.F.I. - II, lauha, 17:2, Charaka samhita chi.16/70-71)/, Saptamrita loha(A.F.I. - I, lauha, 21:11, Bhaishajyaratnavali shoolrogadhikara 83-84)	20
4	4.Bheshaja Kalpana Practicals -I	2	**1. Arka Kalpana:** Yavani Arka (API, Part 2, Vol. 3, Pg. 24) Gulab Arka (API, Part 2, Vol. 3, Pg. 4) Misreya Arka (AFI, Part 1, Vol. 1 A, Pg. 106)	24

			2. Vati Kalpana: Agni Tundi Vati (AFI, Part 1, Vol. 1 A, Pg. 497) Chitrakadi Vati (API, Part 2, Vol. 3, Pg. 107) Lavangadi Vati (API, Part 2, Vol. 3, Pg. 116) **3. Guggulu Kalpana:** Triphala Guggulu (API, Part 2, Vol. 2, Pg. 134) Kaishor Guggulu (API, Part 2, Vol. 1, Pg. 94) **4. Satva Kalpana:** Amruta Satva (AFI, Part 1, Vol. 1 A, Pg. 560) Ardraka Satwa **5. Varti Kalpana:** Phala Varti - (Bhaishajya Ratnavali 31/10) Chandrodaya Varti (AFI, Part 1, Vol. 1 A, Pg. 553) **6. Lavana Kalpana:** Arka Lavana (API, Part 2, Vol. 1, Pg. 103) Narikela Lavana (AFI, Part 1, Vol. 1 A, Pg. 473) **7. Kshara Kalpana:** Apamarga Kshara (AFI, Part 1, Vol. 1 A, Pg. 466) Kshara Sutra Preparation (AFI Part 3, Pg 213) **8. Masi Kalpana:** Triphala Masi (Rasendra Sara Sangraha Upadamsha Chikitsa) Mayura Piccha Masi (Yogratnakar , Chhardiroga, Pg. 453) **9. Upanaha:** Atasi Upanaha **10. Manjana:** Dashanasamskara churna (Bhaishajya Ratnavali Mukharog, 61/97-98) **11. Malahara Kalpana**: Siktha Taila (Rasatarangini 4/59) Sarjarasa Malahara (Rasatantrasar & Siddha Prayog Sangrah Part 1, Pg. 849) Gandhaka Malahara (Rastarangini 8/63-85) **12.Lepa Kalpana:** Dashanga Lepa (AFI, Part 1, Vol. 1 A, Pg.	

			487) Shatadhouta Ghrita (Sushrut Samhita Uttartantra 39/283)	
5	5.BheshajaKalpana Practicals -II	2	**1. Sneha Kalpana:** Ghrita Murchana (Bhaishajya Ratnavali, Jwaradhikar, 1285), Taila Murchana (Bhaishajya Ratnavali, Jwaradhikar, 1286-1287) **2. Ghrita Kalpana:** Triphala Ghrita (API, Part 2, Vol. 1, Pg. 90), Amruta Ghrita (Bhaishajya Ratnavali Vatarakta 27/126) **3. Taila Kalpana**: Ksheera Bala Taila (API, Part 2, Vol. 1, Pg. 124), Arka Taila(Sharangdhar Samhita Madhyam Khanda 9/148) **4. Taila Patana:** Bhallataka Taila Patana (Sushrut Samhita Chikitasa Sthana 1/92) **5. Avaleha Kalpana**: Vasavaleha (API, Part 2, Vol. 1, Pg. 32), Kushmanda Avaleha (AFI, Part 1, Vol. 1 A, Pg. 35) **6. Sharkara Kalpana:** Nimbu Sharkara (Rasatantrasara & Siddhaprayog Sangraha I / Paka Avaleha) **7. Ghana**: Kutaja Ghana(AFI Part 2, Pg 175), Guduchi Ghana (Ayurved Prakash 3) **8. Khanda Kalpana**: Haridra Khanda (Bhaishajya Ratnavali Udarda, Shitapitta), Narikela Khanda (AFI, Part 1, Vol. 1 A, Pg. 41) **9. Asava :** Lohasava (Sharangdhar Samhita, Madhyam Khanda 10/ 34-38), Drakshasava (AFI Part 2, 1:1) **10. Arishta:** Arjunarishta (Bhaishajya Ratnavali Hridrog). Takrarishta (Charak Samhita Chikitsa 15 / 120) **11. Shukta Kalpana:** Kanji (Sharangdhar Samhita, Madhyam Khanda 10/ 12), Madushukta (Bhaishajya Ratnavali Karnaroga 62 /23-24)	22
6	6.Dosage Forms & Self-care Products Practicals	2	**1. Solid dosage forms:** • Granules/ Lozenges (Pharmaceutics by R.M. Mehta)	22

2. Liquid Dosage forms:

- Syrup/Suspension/Emulsion/Liniment (Pharmaceutics by R.M. Mehta)

3. Semisolid Dosage:

- Cream/Gel/Ointment/Pain Balm (Pharmaceutics by R.M. Mehta)

4. Hair Care:

- Shampoo (A Handbook of Cosmetics by B M Mithal & R N Saha 8th chapter)

5. Body Care:

- Soap/Perfume (Pharmaceutics by R.M. Mehta)

6. Face Care:

- Face pack / Talcum Powder (A Handbook of Cosmetics by B M Mithal & R N Saha 3rd chapter)

7. Lip Care:

- Lip Balm, Lipstick (A Handbook of Cosmetics by B M Mithal & R N Saha 4th chapter)

8. Oral Care:

- Tooth Paste/ Mouth Wash (A Handbook of Cosmetics by B M Mithal & R N Saha 19th & 20th chapter)

9. Foot Care:

			• Foot Cream (A Handbook of Cosmetics by B M Mithal & R N Saha 5th chapter) **10. Hand Disinfectant:** • Hand Sanitizer ((Pharmaceutics by R.M. Mehta) **11. Skin Care:** • Moisturizer/Sunscreen Lotion (A Handbook of Cosmetics by B M Mithal & R N Saha 6th chapter) **Note: In each category if more than 1 practical are there any one or all may be performed.**	
7	7.Field Visit/ Study Tour	3	GMP Certified Pharmacy Visit X 2 Pharmacy (1 classical formulations and 1 Proprietary formulations/Having both Manufacturing facility) NABL Accredited drug Testing Laboratory/Research and Development Unit Combined out campus/ Field visit may be planned wherever feasible	24
8	8.Hospital IPD Practical	3	Hospital IPD Practical: Formulation prescription, method administration, dose, time, duration, Pathya, Apathya advised - Minimum 10 case sheet record of different dosage forms prescribed for particular case/ disease	10
9	9. DrugDispensing Practical	3	Drug Dispensing practical for method of Dispensing different dosage forms, their packing for OPD and IPD patients	6
10	10.Quality Control Practicals	2	• **1 Minerals & Metals** Mineral Identification • Physical form – Crystal and	38

			Amorphous • Hardness on Moh's scale • Brittleness test • Fracture and Cleavage • Streak Test • Luster **2 Plant Material** • Estimation of Foreign matter • Specific Gravity • Refractive Index **3. Prepared Dosage forms** A. Solid Dosage Forms Rasaushadhi • Bhasma and Pishti Pariksha • Determination of Moisture content **4. Kashtoushadhi** a. Churna • Particle Size • Bulk Density • Determination of Ash Value – Total Water Soluble/Acid Insoluble ash b. Tablets • Uniformity in Weight and Size • Tablet Hardness B. Semisolid Dosage forms • Moisture Content • Microbial Load C. Liquid Dosage Forms • PH Value • Refractive Index • Specific Gravity • Saponification Value • Iodine Value • Acid Value • Viscosity **Note :** • All Practical should be performed in Accordance of Methods published in protocol for testing of ASU Medicines and	

			Laboratory Guide for Analysis of Ayurveda & Siddha formulations published by Dept of AYUSH, GOI • Minimum 5 Analytical Practicals are to be written in Practical Record or In Journal	
				Total Hr **210**

Activity

CO	Topic name	Activity Details	Hours#
CO1,CO2	Paper I -1. Chronological development of Ayurvediya Aushadhi Nirmana	**Objective** - To orient the students regarding chronological development of Rasashastra & Bhaishajya Kalpana After completing this activity, students will be able to: • Describe the history of Rasashastra & Bhaishajya Kalpana. • Identify the different types of metal-based medicines. • Explain the benefits of metal-based medicines. • Discuss the safety of metal-based medicines. **Methodology** 1) All students are to be assigned to collect and compile information on chronological	1

		development of Rasashastra & Bhaishajya Kalpana from different books, including Indians are the first, who introduced metal based medicines. 2) Ask to Submit the assignment for signature	
CO1,CO2	Paper I - 2. a) Paribhasha(Terminology)	**Rasadravya** **Objective** - To encourage the students to remember rasadravyas and their classification through games **Activity** **Group I** -In one big tray all Rasa - Dravyas are to be kept together. Timer to be started. In a stipulated time, student has to collect drugs belonging to the particular class (rasadravya varga) allotted to him /her and create a heap in order This can be given in a group. **Group 2.**-Word puzzle Various word puzzles can be created for making the students to remember names of rasadravyas along with their class.	1
CO1,CO3	Paper I -2. b)Paribhasha	**Mana Paribhasha Objective** - After completing this activity, students will be able to:	2

		• weigh dry & wet drugs • Understand the % of weight loss after drying different variety of the wet drugs • Enjoy (game based) learning about rasadravyas and their classification. **Methodology-** whole batch need to be divided into various groups. (4-5 students in each group). Each group need to make a chart/ task as per the instructions written on the paper they pick up. 1) Collect seeds mentioned in the classical mana paribhasha and prepare chart describing details of mana 2) Measure by weight the given drug. (Guduchi Bharad, Amalaki Bharad, Haritaki Churna, Nimbapatra churna, whole maricha all will be kept having same weight) Now observe how much volume these drugs have. 3) Collect fresh Guduchi.500gm or any fresh drugs leaf, bark, flower etc. Keep on observing the reduction in the weight of the sample till it dries completely. Record weight every day. Discussion about observation will be done. Do this same for Vasa, Shatavari, Amalaki also. Compare and assess the results. Every year drugs need to be changed	
CO1,CO2	Paper I -2. c)Paribhasha Terminology	**Shodhana**	1

Objective - To enhance ability of the students to recall their knowlege about rasadravyas and their procedures

At the end of Activity, the students should be able to

Recall the different shodhana methods that are used for rasadravyas.

• Identify the different yantras that are used for shodhana.

• Understand the different procedures that are used for shodhana.

• Correctly answer questions about shodhana methods, yantras, and procedures.

• Explain the different steps involved in the shodhana process.

• Discuss the benefits of shodhana for rasadravyas.

Activity-

Rapid Fire quiz online

Questions will be framed based on the knowlegde of Yanra, Dravya, Method used for that drug etc and rapid fire round will be carried out.This can be done online

Questions for example-

1) Vanga Shodhan is done by which method?

2) Which yantra is used for Shankha Shodhan?

		3) LashunaSvarasa bhavana is used for shodhana of which drug?	
CO1,CO2	**Paper I- 3.Adharabhuta Siddhanta (Fundamental Principles)**	**Objective :** To understand the concept with the help of classical shloka & application of fundamental principles of Ayurvediya aushadhi nirmana. **After completing this activity, students will be able to:** • Identify the different fundamental principles of Ayurvediya Aushadhi Nirmana. • Illustrate how these principles are applied in the preparation of Ayurvedic formulations. • Interpret classical shlokas related to the application of fundamental principles using Panchavayavavakya. • Demonstrate the skill of interpreting classical shlokas using Panchavayavavakya. • Students are to be divided into 5 groups • Each group need to be given 2 Shlokas from particular classical text book **Method of Activity:** 1. The students are divided into groups & each group need to be allotted 1 to 2 shlokas from classics related to application of fundamental principles. 2. To develop skill of interpretation of shloka by applying Panchavayava vakya i.e Pratignya,	2

		Hetu, Udhaharana,Upanaya and nigamana 3. They will understand application of basic fundaments. 4. Every year different sets of shlokas are to be given. Repetition of shlokas is not acceptable **Discussion:** After completion of task, discussion need to be held with teacher and students. Teacher in charge will finally conclude the discussion on application of fundamental principles and understanding the shloka by applying Panchavayavavakya. **Optional Activity** Activity - 1 Title : Search references from classical text Group : Students should be divided in to 10 groups. Reference Text : 1.Chakradatta 2.Yogaratnakara 3.Bhavaprakasha 4.Sharangadhara 1GP : DravyaSamgraha method 2 GP : Collection Time 3 Gp :Collection Part 4 GP : Examples of Samskara 5 GP :Collection Nakshatra 6 GP :Pranija dravya partcollection 7 GP :Duplication Yoga 8 GP : Namakarana on Mana/Number of Dravya 9 GP : Saveeryata Avadhi 10 GP : Anupana in classical Yoga	

CO1,CO5	**Paper I** **-4.Yantropakaranani - I (Equipments and machineries)**	**Objectives:-** After completing this activity, students will be able to: • Identify the different yantras that are used in the preparation of Ayurvedic formulations. • interpret the different procedures of drug preparation that use yantras. • Collect information on different yantras from classical text books. • Present their findings in a clear and concise way. **Actvity** • Students need to be divided into 4 groups (15 to 25 students in each group) • Each group need to be given one reference book • They have to collect information on different yantras explained /used for different procedures of drug preparation from that book. • Books like Ananda kanda, Rasa Tarangini, Rasa Ratna Samuchyaya, Rasendra Sara Sangraha, Parada Samhita etc can be given • Every year digfferent books are to be given. • Each Group has to present/ Submit assignment on total no of Yantras mentioned, their different uses, Structure/ Picture etc **Discussion**: In charge teacher will comment on particular group performance and study matter	4

		collected.	
CO1,CO5	**Paper I** **-5.Yantropakaranani - II (Equipments and machineries)**	**Objective:-** After completing this activity, students will be able to: • Prepare a video/ppt demonstration on Musha, Koshthi and Puta. • Model the preparation of Musha, Koshti and Puta. • Collect literature on Musha, Koshti and Puta from classical text books as per different authors. • Identify modern/presently available Yantras based on the classical concept of Musha, Koshti and Puta. **Actvity** **Students are to be divided into 4 groups** **Group I-** is allotted to prepare video/ppt demonstration **Group II-**Model preparation of Musha, Koshthi and Puta **Group III-** Literature collection from classical text books as per different authors on Musha, Koshthi and Puta **Group IV** - Modern / Presently available Yantras based on the classical concept of our yantra, Musha, Koshthi and Puta **Note:** Every year different yantras/ instruments need to be given	4

		Discussion and Conclusion: Each group has to present their activity followed by teacher's remark	
CO1,CO2	**Paper I- 6. Kalpana Nirmana I(Primary & Secondary dosage forms)**	**Objective:-** **After completing this activity, students will be able to:** • Identify the different dosage forms that are commonly used in Ayurveda. • Appraise the different methods that are used to prepare these dosage forms. • Document the different activities that are performed at home and in communities/societies related to the preparation of these dosage forms. • Prepare two dosage forms in the laboratory from their observation of home preparations. **Methodology:** 1. Every student will document different activities performed at home and in societies/communities related to the preparation of different dosage forms which come under Panchavidha kashaya kalpana , Upakalpana and their household applications.(for example-fruit juices belong to svarasa kalpana, chutney to kalka etc.) Discussion: 1.The students will be assessed based on their documentation 2. A group containing 10 number of students will be asked to collect the raw materials and prepare	4

		minimum two numbers of dosage forms in the laboratory from their observation of home preparations. 3. Finally an interactive session will be held to discuss the learning experiences and to clear doubts	
CO5	Paper I- 7 & 11. Kalpana Nirmana II &III (Method of preparation of different dosage forms & dietary supliments)	**objective: -** **After completing this activity, students will be able to:** • Identify the different dosage forms that are commonly used in Ayurveda. • Appraise the different methods that are used to prepare these dosage forms. • Document the different activities researches related to the preparation of these dosage forms. **Methodology: -** 1.Students need to be divided into 4 different groups. 2.**Group 1 -** Directed to collect information on different varieties of proprietary Ayurvedic and contemporary solid dosage forms available in the market through e-resources (e.g. tablets, capsules, lozenges etc) 3.**Group 2**- Directed to collect information on different varieties of proprietary Ayurvedic and contemporary Liquid dosage forms available in the market through e-resources (e.g. Oils, syrups, suspensions etc) 4.**Group 3** - Directed to collect information on	10

		different varieties of proprietary Ayurvedic and contemporary semisolid dosage forms available in the market through e-resources (e.g. ointments, gels, jellies etc) 5.**Group 4** - Directed to collect research articles published on modification of classical Ayurvedic dosage forms through e-resources on solid, liquid and semisolid dosage forms. Discussion: -Finally Students have to present the collected information in the form of power point presentation and submit the assignment. In charge teacher has to conclude by stressing upon scope for research and development in modification of classical dosage forms. The mentioned activity is an example. **Note:** Every year different formulations/ dosage forms/ activity need to be given.	
CO1,CO2,CO3	**Paper I- 8.Rasa Dravya Parichaya - I MK**	**Objecives:-** **After completing this activity, students will be able to:** • Justify the importance of identifying genuine Rasa Dravyas. • Learn to interpret classical and mineralogical criteria for identifying Rasa Dravyas. • Communicate findings effectively **Method of Activity:** 1. Students are to be divided into 4 to 5 groups 2. Each group is to be given 5 Rasadravyas (from	4

		must to know dravya list). 3. Students will be instructed to collect raw samples/ Pictures / Photos of assigned Rasa Dravya 4. Students have to interpret classical as well as mineralogical criteria for identifying that Rasa Dravya. 5. Encourage them to develop the skill of identification of various Rasa Dravyas and to understand its necessity. **Discussion & Conclusion** Each Group has to share the presentation. Finally, teacher has to give concluding remarks. **Note:** The mentioned activity is an example. Every year different sets of drugs/ activity need to be given.	
CO1,CO2,CO3	**Paper I-9.Rasa Dravya Parichaya II - DK**	**Objectives :-** **After completing this activity, students will be able to:** • Document the different rasa dravyas that are considered to be desirable to know. • Gather information about each rasa dravya, such as its Sanskrit name, English name, synonyms, botanical name, physical appearance, taste, and medicinal properties. • Present the findings in a clear and concise way.	6

		• Debate and justify that their drug is more superior than other drugs in the same group. **Method of Activity:** 1. Students are to be divided into 4 groups 2. The students will be instructed to refer and collect photos, general information, medicinal uses from classical text books and e resources. 3. Each group is to be given 2 drugs. 4. The mentioned activity is an example. Every year different rasadravya / activity need to be given. **Discussion:** After the completion of compilation of desirable to know Rasa Dravya, each group will present short review of their work in front of the class and they have to debate and justify that their drug is more superior than other drugs in the same group. Finally, teacher have to give concluding remark on debate.	
CO3	**Paper I- 10.Rasa Dravya Parichaya - III NK**	**Objectives :-** **After completing this activity, students will be able to:** • Document the different rasa dravyas that are considered to be desirable to know. • Gather information about each rasa dravya, such as its Sanskrit name, English name, synonyms, botanical name, physical appearance,	6

		taste, and medicinal properties. • Present the findings in a clear and concise way. • Debate and justify that their drug is more superior than other drugs in the same group.To compile, understand and document basic information about certain Rasa Darvyas. (this activity is for nice to know dravyas) **Methodology:** 1. Students are to be divided into 4 groups 2. The students will be instructed to refer and collect photos, general information, medicinal uses of given dravyas from classical text books and e resources. 3. Each group is to be given 4 drugs. 4. The mentioned activity is an example. Every year different drugs/ activity need to be given. **Discussion:** After the completion of compilation of nice to know Rasa Dravya, each group will present short review of their findings, in front of class and they have to debate and justify that their drugs are more superior than other drugs. Finally, teacher have to give concluding remark on debate. Note: Every year different drugs are to be given.	

CO1,CO2,CO3,CO5	**Paper I - 12.Chaturvidha Rasayana -MK**	**Objectives:-** • Collect information on different Chaturvidha Rasa formulations. • Identify the different manufacturing companies that produce Chaturvidha Rasa formulations. • appraise the different classical references that are used to manufacture Chaturvidha Rasa formulations. • Compare the MRP (prices) of different Chaturvidha Rasa formulations. • Identify the indications for different Chaturvidha Rasa formulations. • Analyze the different Chaturvidha Rasa formulations and develop critical thinking skills. • Communicate their findings effectively to the class. **Method of Activity: (Survey)** **Students are to be divided into 5 groups** **1. Group 1-** Need to be assigned to collect information on Swarna Bhasma manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **2. Group 2-** Need to be assigned to collect varieties of parpati containing suvarna bhasma as one ingredient in it, their manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **3. Group 3-** Need to be assigned to collect varieties of kupipakwa rasayanas containing suvarna bhasma as one ingredient in it,	4

		manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **4. Group 4 -** Need to be assigned to collect varieties of pottali rasayanas containing suvarna bhasma as one ingredient in it, manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications **5. Group 5 -** Need to be assigned to collect varieties of kharaliya rasayanas containing suvarna bhasma as one ingredient in it, manufacturing companies, classical references they follow to manufacture it, MRP (prices) and indications 6.The mentioned activity is an example. Every year different formulations/ activity need to be given. **Discussion:** All groups have to present their assignment and finally in charge teacher has to give conclusion of importance of swarnakalpa. rationality behind following different references and probable variation in their cost.	
CO1	**Paper I- 13.Current and Emerging Trends in Ayurvedic pharmaceuticals**	**Objectives:** - • Identify the current and emerging trends in Ayurvedic Pharmaceuticals. • Analyze the potential impact of these trends on the future of Ayurvedic Pharmaceuticals. • Review and record the commonly used modified dosage forms of Ayurvedic	4

		formulations. • Evaluate the potential of these modified dosage forms to improve the efficacy and safety of Ayurvedic formulations. **Method of Activity** Students need to be divided into 3 groups **Group 1**. List the current and emerging trends in Ayurvedic Pharmaceuticals viz. cosmetics, Neutraceuticals, Herbaceuticals **Group 2**. Review and record the commonly used modified dosage forms of Ayurvedic formulations **Group 3.** Generate a folder on computer about relevant research articles on modified Ayurvedic dosage forms **Discussion :** All the above groups will present their assignment with their team and Exchange of Knowledge will take place followed by conclusion by faculty in charge	
CO4	Paper I - 14. GMP & Drug and Cosmetic act 1940 and rules 1945	**Objective:** **After completing this activity, students will be able to:** • Identify misleading advertisements under the Drug & Magic Remedies objectionable advertisements Act, 1954. • Analyze misleading advertisements and identify the specific provisions of the Act that are being violated.	4

		• Communicate their findings in a clear and concise way. **Methodology: -** **Students are to be divided into 5 students in each group** 1.Each group need to report two misleading advertisements under Drug & Magic Remedies - objectionable advertisements Act, 1954 advertising through TV channels, print media or electronic media etc. 2.The students will ask to submit details of objectionable advertisements in the prescribed format. **Discussion: -** After the submission of reports, the students will be asked to present and an interaction will be held between students and the concerned teacher (s) to understand the act & rules of objectionable advertisements as a learning experience.	
CO1	Paper II -1. Aushadhi Prayoga Vigyana	**Objective:** **After completing this activity, students will be able to:** • Understand the concept of Prashasta Bheshaja lakshana. • Identify the different aspects of Prashasta Bheshaja lakshana, such as bahu kalpam, bahugunam, and sampannam.	2

		• Gather information about a given drug/formulation and justify whether it is a Prashasta Bheshaja. • Communicate their findings in a clear and concise way. **Method of Activity** Students will be divided in Groups consisting of 10 Students in each group each group will be given one drug/Formulation They have to search information about Prashasta bheshaja on following aspects- 1.Bahu Kalpam 2.Bahugunam 3.Sampannam justify that the drug which they are allotted drug/formulation Each team will present their Justification followed by conclusion by designated faculty.	
CO1,CO3	**Paper II- 2.Single drug (Herbal & Mineral)**	**Objective:** **After completing this activity, students will be able to demonstrate their knowledge of herbal and mineral drugs by:** • Identifying and differentiating between	2

		different types of herbal and mineral drugs, with at least 5 examples of each. • Understanding the different formulations of herbal and mineral drugs, with at least 3 examples of each formulation. • Learning about the different indications for herbal and mineral drugs, with at least 3 examples of each indication. • Learning about the different anupanas that can be used with herbal and mineral drugs, with at least 3 examples of each anupana. • Understanding the importance of pathyaapatya, sevana kala, and saveeryatavadhi in the administration of herbal and mineral drugs. • Communicating their findings in a clear and concise way, including a presentation to the class that is clear, concise, and answers questions about the drugs. **Method of Activity** 1. Students need to divided into groups as per convenience 2. Each group need to be assigned with one herbal or one mineral drug or from both categories 3. Advised to collect information on assigned single drug/drugs variety of formulations, different indications when given in different form, with different anupana, Pathyaapatya, sevana kala, saveeryatavadhi and research updates and clinical evidences for each of the formulations 4. Every year different drugs are to be allotted to avoid repetition.	

CO1,CO2,CO3	**Paper II -3.Single Drug (Bhasma, Shuudha & Pishti)- Mk**	**Objective** **After completing this activity, students will be able to demonstrate their knowledge of market research by:** • Conducting a market survey of one or two bhasmas in a particular city. • Collecting and documenting information about the market demand for the bhasma, such as the price, the dosage, and the frequency of use. • Analyzing the data collected to determine the market trends for the bhasma. • Communicating their findings in a clear and concise way, including a presentation to the class. **Method of Activity:** 1.The students instructed to visit Ayurvedic drug store and collect information as given in the format. 2.Students need to be divided into 4 to 5 groups. Each group need to be given 1 to 2 drugs. (Every year different drugs are to be allotted to avoid repetition.) 3.Each group has to visit one to two Ayurvedic drug stores. Number of stores can be increased based on number of drug stores in the city or around the city.(based on information of online survey) After collecting information students have to submit survey forms to department	6

CO1,CO2	Paper II- 4. Aushadhi Kalpa-I(Compound Formulations)	**Horizontal Integration Activity with Department of Agada Tantra** **Objective** **After completing this activity,** • Students will be able to demonstrate their knowledge of the preparation and uses of agadas by: • Preparing five different agadas under the guidance of Rasashastra & Bk Dept faculty.. • Presenting their findings on the ingredients, method of preparation, uses, dosage, anupana, and mode of action of the agadas. • Communicating the utility of the agadas in different conditions, research updates with case studies, and dosage, anupana, and duration of agada kalpa prayoga. **Method of Activity** **Students will be divided into 5 groups** Each group will get hands on training to prepare one peculiar agada (mentioned in following list) and faculty from Agada Tantra department will give information about its utility in different Visha Laxana/or Stages of visha dushta.All details about agada kalpa prayoga viz.Dosage, Anupana, Duration will be discussed -2hrs Team 1: Bilavdi Agada Team 2: Dooshivishari Agada Team 3: Dashanga Agada Team 4: Murvadi Agada Team 5: Pancha Shireesha Agada Presentation will be done by all Teams on	4

		Ingredients, Method of Preparation, Video/ Photos of ingredients, preparation, uses, dosage, Anupana Every year different topics are to be selected for integrated activity. Repetition should be avoided. Discussion will be done on mode of action, utility of above prepared Agadas in different conditions, Research updates with Case studies by Agada Tantra Faculty	
CO3	**Paper II - 5. Aushadhi Kalpa - II(Compound drugs/ formulations)**	**Objective** **After completing this activity, students will be able to:** • Identify the different types of research updates and clinical evidences that are available for the formulations listed in the syllabus Aushadhi Kalpa - II(Compound drugs/ formulations). • Collect and compile research updates and clinical evidences for the formulations assigned to them. • Review the research updates and clinical evidences to determine their relevance and significance. • Communicate their findings in a clear and concise way. **Methodology of Activity :** 1.Students are to be divided into 5 to 6 groups 2.Each group is to be assigned 2 to 3 formulations in the syllabus.	2

		3.Groups are instructed to collect Research updates and clinical evidences for formulations assigned to them 4. Every year different formulations are to be allotted to avoid repetition. **Submission of Assignment:** After the completion of compilation groups have to submit the assignment for correction.	
CO4	Paper II - 6 Dosage forms & cosmetic productsPaper II- 7. Nutraceuticals	**objective** **After completing this activity, students will be able to:** • Identify the different types of cosmetic and nutraceutical products. • Understand the legal and regulatory requirements for these products. • Research the market for these products. • Analyze the quality control tests that are recommended for these products. • Prepare a report/assignment on the selected products. • Communicate their findings in a clear and concise way. • Answer questions about their findings. • Communicate the significance of various guidelines used for testing of food products and cosmetics in brief.	3

Methodology: -

1. Students are to be divided into 5-6 groups

2. Each group need to be given one to two cosmetic or nutraceutical products for eg. Lipstick, lip balm, Energy drink, Nutritional supplement for children, working women, pregnant women etc.

3.The students will be asked to prepare a report/assignment on number of companies selling such products. Information should be compiled about their major ingredients, preservatives, price, market value, quality control tests recommended etc.

4. For that Nutritional Product, the students will be asked to go through the quality parameters and nutritional values displayed on packages of food products as per the guidelines of Food Safety and Standards Authority of India (FSSAI).

5. Every year different products are to be allotted to avoid repetition

Discussion: - After the submission of reports, a discussion will be held among the students and the teacher(s) to understand the significance of various guidelines used for testing of food products and cosmetics in brief.

Optional Activity

Objectives-

after completion of the course students should be able to prepare dosage forms and self care products in the syllabus.

Short term course/ Module

		Online/offline mode in collaboration with Pharmacy college Dosage Forms & Self-care Products Assessment through MCQ's Duration of the course may be 22hrs including online assessment	
CO1,CO3,CO6	Paper II- 8 Anupana Prayoga for Aushadhi KalpaPaper II- 9. Aushadhi Prayoga Marga	**Objective** **After the completion of this activity** • Students should be able to explain/present the probable pharmacokinetic and pharmacodynamic principles of assigned Ayurvedic drugs & Anupana in different condition or indication **Method of Activity: -** 1.Students will be divided into 5 to 6 groups 2.Each group need to be allotted formulations/ single drug/Bhasma/Pishti etc 3.Students are asked to explain the therapeutic importance of five formulations with respect to different Anupana, Aushadhiprayoga marga and their utility in different disorders with the probable pharmacokinetic and pharmacodynamic principles involved in the use of assigned Ayurvedic drugs. 4. students have to submit assignment / sharing ppt presentation in the activity group **Discussion: -** After the completion of this task, students should be able to explain/present the probable pharmacokinetic and pharmacodynamic principles of assigned Ayurvedic drugs. In charge teacher has to conclude on collection of compiled matter and drugs action.	2

CO3	Paper II 10. Rational prescription along with safe dispensing of Ayutrvedic formulations.	**Objective** **After completing this activity, students will be able to:** • Identify the different components of a prescription. • Analyse the prescriptions to determine whether they are rational. • Discuss the significance of ideal prescription and rationality of use of drugs in Ayurveda. **Methodology: -** 1.Students are to be divided into 4 to 5 groups 2.Each group is advised to collect 4 to 5 prescriptions from different departments of the hospital. 3.The students are asked to visit hospital to go through the randomly selected five prescriptions for promoting them to know the ideal prescription and rational use of drugs. 4.The students will be asked to present their review of this activity during the non-lecture hours. 5.Strictly instructions should be given to maintain confidentiality about patient's name and consultant's name. **Discussion: -** After the completion of the task, an interaction will be held among the students and the concerned teacher (s) to understand the	4

		significance of ideal prescription and rationality of use of drugs in Ayurvedic practices.	
CO1,CO5	Paper II 11. Traditional and local health practices	**Objective** **After completing this activity, students will be able to:** • Identify different types of traditional healers in their local area/region. • Interview traditional healers to understand their practices. • Document the practices of traditional healers in a way that is respectful and preserves their knowledge. • Communicate the findings of their research to others. **Methodology :** 1. To understand the practices of traditional healers/ Folklore healers- the students are instructed to visit and meet some of the folk healers / traditional healers who have been practicing since ages in their local area/region. During their holiday/vacation students can complete this survey in and around the institute or near their residential place. 2. The students may act as a bridge between Ayurveda and traditional/local healers by making them understand the beneficial effect of technology and how this can help the healers to expand their treatment to a larger mass. Because many a times it has been observed that the healers are reluctant or they don't entertain the students who come to meet them for fear of exploitation or theft of their knowledge.	4

		3. By doing this practice, the healers will develop confidence on students which helps in collecting /documenting practices, through which a new horizon may open in the field of medicinal research. **Discussion:** After the completion of the visit, an interaction need to be held among the concerned teachers and students to discuss the learning experiences, and try to find out difficulties so that in future those things can be managed or avoided to make things easier.	
CO4	Paper II 12. Pharmacovigilance for Ayurveda drugs	**Objective** **After completing this activity, students will be able to:** • Identify the different types of adverse drug reactions (ADRs). • Describe the detection criteria for ADRs. • Explain the assessment techniques for ADRs. • Discuss the prevention criteria for ADRs. • Able to fill out an ADR reporting format **Methodology: -** The students will be asked to visit hospital or go through the previously reported cases to discuss for detection criteria, assessment techniques, understanding and prevention criteria of ADRs. Every student is assigned to fill up the ADR reporting format by allotting imaginary situation/ real case	4

		Discussion: - After the visit, an interaction will be held among the concerned teacher(s) and the students to discuss the learning experiences, and the importance of ADRs, their assessment and reporting techniques.	

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	15
2	Lecture with Power point presentation	82
3	Lecture & Group Discussion	25
4	Lecture with Video clips	14
5	Discussions	46
6	Brainstorming	29
7	Inquiry-Based Learning	25
8	PBL	1
9	CBL	1
10	Project-Based Learning	15
11	Team project work	12
12	Blended Learning	1
13	Edutainment	1
14	Mobile learning	2
15	Self-directed learning	23
16	Problem solving method	2
17	Workshops	1
18	Game-Based Learning	2
19	Demo on Model	2
20	Library Session	7

21	Peer learning	1
22	Real life experience	5
23	Recitation	2
24	Symposium	1
25	Tutorial	2
26	Presentations	2
27	Practical	7
28	Drug analysis	1
29	Demonstration	2
30	Demonstration Lab	4
31	Field visit	2

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-RB	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE **

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 2	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-RB
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Ayurvediya Aushadhi Nirmana Vigyana						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**1.Chronological development of Ayurvediya Aushadhi Nirmana**	1	05	No	Yes	No
2	**2.Paribhasha (Terminology)**	1	10	Yes	Yes	No
3	**3.Adharbhuta Siddhanta (Application of fundamental principles)**	1	05	Yes	Yes	No
4	**4.Yantropakaranani- I (Equipments and machineries)**	1	05	Yes	Yes	No
5	**5.Yantropakaranani -II (Equipments, fuel and Heating Devices)**	1	05	Yes	Yes	No
6	**6.Kalpana Nirmana I (Primary & Secondary dosage forms)**	1	10	Yes	Yes	Yes
7	**7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements))**	1	10	Yes	Yes	Yes
8	**8.Rasa Dravya Parichaya- I**	2	10	Yes	Yes	Yes
9	**9.Rasa Dravya Parichaya II**	2	5	Yes	Yes	No
10	**10.Rasadravya Parichaya III**	2	5	Yes	No	No
11	**11.Kalpana Nirman -III (Method of Preparation of different dosage forms)**	2	10	Yes	Yes	Yes
12	**12.Chaturvidha Rasayana**	2	10	Yes	Yes	Yes
13	**13.Current and emerging trend in Ayurvedic pharmaceuticals**	3	5	No	Yes	No

14	**14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs**	3	5	Yes	Yes	No
Total Marks			**100**			

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
15	**1.Aushadhi Prayoga Vigyana**	1	5	Yes	Yes	No
16	**2.Single drug (Herbal & Mineral)**	1	10	Yes	Yes	Yes
17	**3.Single drug(Bhasma, Shuddha & Pishti)**	2	15	Yes	Yes	Yes
18	**4.Aushadhi Kalpa -I (Compound formulations)**	2	15	Yes	Yes	Yes
19	**5.Aushadhi Kalpa-II (Compound Drugs/Formulations)**	3	15	Yes	Yes	Yes
20	**6.Dosage Forms & Cosmetic Products**	3	5	Yes	Yes	No
21	**7.Nutraceuticals**	3	5	Yes	Yes	No
22	**8.Anupana Prayoga for Aushadhi Kalpa**	3	5	Yes	Yes	No
23	**9.Aushadhi Prayoga Marga**	3	10	Yes	Yes	Yes
24	**10.Rational prescription along with safe dispensing of Ayurvedic formulations.**	3	5	No	Yes	No
25	**11.Traditional & Local health Practices**	3	5	No	Yes	No
26	**12.Pharmacovigilance for Ayurveda drugs**	3	5	Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 2.Paribhasha (Terminology) **2.** 2.Paribhasha (Terminology) **3.** 2.Paribhasha (Terminology) **4.** 4.Yantropakaranani- I (Equipments and machineries) **5.** 5.Yantropakaranani -II (Equipments, fuel and Heating Devices) **6.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **7.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **8.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **9.** 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) **10.** 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) **11.** 8.Rasa Dravya Parichaya- I **12.** 8.Rasa Dravya Parichaya- I **13.** 8.Rasa Dravya Parichaya- I **14.** 8.Rasa Dravya Parichaya- I **15.** 9.Rasa Dravya Parichaya II **16.** 10.Rasadravya Parichaya III **17.** 11.Kalpana Nirman -III (Method of Preparation of different dosage forms) **18.** 12.Chaturvidha Rasayana **19.** 12.Chaturvidha Rasayana **20.** 14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 1.Chronological development of Ayurvediya Aushadhi Nirmana **2.** 3.Adharbhuta Siddhanta (Application of fundamental principles) / 2.Paribhasha (Terminology) **3.** 9.Rasa Dravya Parichaya II / 4.Yantropakaranani- I (Equipments and machineries) / 5.Yantropakaranani -II (Equipments, fuel and Heating Devices) **4.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **5.** 7.Kalpana Nirmana-II (Method of Preparation

		of different dosage forms& Dietary Supplements)) **6.** 9.Rasa Dravya Parichaya II / 8.Rasa Dravya Parichaya- I **7.** 12.Chaturvidha Rasayana **8.** 14.GMP(Schedule T) & Regulatory aspects of Ayurvedic drugs / 13.Current and emerging trend in Ayurvedic pharmaceuticals
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 6.Kalpana Nirmana I (Primary & Secondary dosage forms) **2.** 7.Kalpana Nirmana-II (Method of Preparation of different dosage forms& Dietary Supplements)) **3.** 8.Rasa Dravya Parichaya- I **4.** 11.Kalpana Nirman -III (Method of Preparation of different dosage forms) / 12.Chaturvidha Rasayana
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 1.Aushadhi Prayoga Vigyana **2.** 2.Single drug (Herbal & Mineral) **3.** 2.Single drug (Herbal & Mineral) **4.** 3.Single drug(Bhasma, Shuddha & Pishti) **5.** 3.Single drug(Bhasma, Shuddha & Pishti) **6.** 3.Single drug(Bhasma, Shuddha & Pishti) **7.** 3.Single drug(Bhasma, Shuddha & Pishti) **8.** 4.Aushadhi Kalpa -I (Compound formulations) **9.** 4.Aushadhi Kalpa -I (Compound formulations) **10.** 4.Aushadhi Kalpa -I (Compound formulations) **11.** 4.Aushadhi Kalpa -I (Compound formulations) **12.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **13.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **14.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **15.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **16.** 6.Dosage Forms & Cosmetic Products

		17. 7.Nutraceuticals **18.** 8.Anupana Prayoga for Aushadhi Kalpa **19.** 9.Aushadhi Prayoga Marga **20.** 12.Pharmacovigilance for Ayurveda drugs
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 8.Anupana Prayoga for Aushadhi Kalpa / 1.Aushadhi Prayoga Vigyana **2.** 2.Single drug (Herbal & Mineral) **3.** 3.Single drug(Bhasma, Shuddha & Pishti) **4.** 4.Aushadhi Kalpa -I (Compound formulations) **5.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations) **6.** 7.Nutraceuticals **7.** 9.Aushadhi Prayoga Marga **8.** 12.Pharmacovigilance for Ayurveda drugs / 10.Rational prescription along with safe dispensing of Ayurvedic formulations. / 6.Dosage Forms & Cosmetic Products / 11.Traditional & Local health Practices
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 2.Single drug (Herbal & Mineral) / 9.Aushadhi Prayoga Marga **2.** 3.Single drug(Bhasma, Shuddha & Pishti) **3.** 4.Aushadhi Kalpa -I (Compound formulations) **4.** 5.Aushadhi Kalpa-II (Compound Drugs/Formulations)

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	**1.Spotting (10 sample + 5 Instruments/ equipments)** **Identification (1 mark) answering sub question related to spotter(1 mark) 15x2=30 marks Choose spotter from below mentioned list** 1. Parada (mercury), 2. Abhraka (Biotite Mica), 3. Makshika (Chalco-pyrite), 4. Shilajatu(Asphaltum Punjabianum) 5. Gandhaka (Sulfur) 6. Gairika(Red Ochre) 7. Kankshi (Alum) 8. Haratala (Orpiment) 9. Manahshila (Realgar) 10. Kampillaka(Mallotus Philippinensis) 11. Navasadara (Ammonium chloride) 12. Hingula (Red Cinnabar) 13. Tamra (Copper) 14. Loha (Iron) 15. Mandur (rust iron) 16. Vanga (Tin) 17. Naga (Lead) 18. Yashada (Zinc) 19. Pravala (Coral) 20. Kaparda (Cowries) 21. Shukti (Oyster Shell) 22. Shankh (Conch Shell) 23. Godanti (Gypsum) 24. Samudraphena (Cattle Fish bone) 25. Kukkutanda twak (Hen's EggShell), 26. Tankana kshara (Borax) 27. Sasyaka (Peacock ore) 28. Kasisa (Green Vitriol), 29. Gauri pashana (Arsenic oxide) 30. Akika(Agate), 31. Sudha (Lime stone) 32. Khatika 33. Dugdhapashana (Talc) 34. Vimala 35. Rasaka 36. Yantra	30

	37. Dola Yantra 38. DamaruYantra 39. Valuka Yantra 40. Puta Yantra 41. Khalwa Yantra 42. Patana Yantra 43. Darvika Yantra 44. Ulukhala Yantra 45. Patala Yantra 46. Kupi Yantra 47. Arkapatana Yantra 48. Pithara Yantra 49. Sharava Yantra 50. Palika Yantra 51. Sthali Yantra 52. Swedana Yantra 53. Moh's scale 54. Tablet Hardness tester 55. Ph Meter 56. Muffle Furnace 57. Electronic Weighing machine 58. Pycnometer 59. Large scale manufacturing instruments & equipments in the syllabus Photos /Pictures may be used for spotting	
2	**2. Long Practical** • Selection of Ingredients with proportion(10Marks) • Preparation following SOP (15 marks) • Demonstration of Siddhi lakshana(05Marks) • on site viva (10 Marks) **List of Long Practicals** 1. Sitopaladi churna 2. Hingwastaka Churn 3. Agni Tundi Vati 4. Chitrakadi Vati 5. Lavangadi Vati 6. Triphala Guggulu 7. Kaishor Guggulu 8. Phala Varti 9. Chandrodaya Varti	40

	10. Arka Lavana 11. Narikela Lavana 12. Atasi Upanaha 13. Dashanasamskara churna 14. Gandhaka Malahara 15. Dashanga Lepa 16. Mustadi Pramathya 17. Shadanga Paneeya 18. Kharjuradi Mantha 19. Chincha Panaka 20. Chandana Panaka 21. Ghrita Murchana 22. Taila Murchana 23. Triphala Ghrita 24. Amruta Ghrita 25. Ksheera Bala Taila 26. Arka Taila 27. Vasavaleha 28. Nimbu Sharkara 29. Kutaja Ghana 30. Guduchi Ghana 31. Haridra Khanda 32. Narikela Khanda 33. Ananda Bhairava Rasa 34. Tribhuvana Keerti rasa 35. Rasa Parpati 36. Sweta Parpati 37. Laghusutsekhararasa 38. Navayasa loha 39. Saptamrita loha **Note: for preparation shuddha dravya, decoction,murchita gritha, murchita taila etc are to be provided for long practical**	
3	**3.Short Practical** • **Selection of Ingredients with proportion(5Marks)** • **Preparation following SOP (5 marks)** • **Demonstration of Siddhi lakshana(5Marks)** • **on site viva (5 Marks)** **List of Short Practicals** 1. Godanti Shodhana 2. Shankha Shodhana	20

	3. Kapardika shodhana 4. Guggulu Shodhana 5. Gandhaka Shodhana 6. Vanga Shodhana 7. Yashada shodhana 8. Abhraka Shodhana 9. Tamra Shodhana 10. Tankana Shodhana 11. Kankshi shodhana 12. Hingula Shodhana 13. Gairika Shodhana 14. Hingu Shodhana 15. Mugdha Rasa 16. Tamra Bhasma (Dadhi/ Nimbu Pariksha) 17. Triphala Masi 18. Mayura Piccha Masi 19. Vasaputapaka Swarasa 20. Amruta Satva 21. Arjuna Ksheera Paka 22. Lashuna Ksheerapaka 23. Punarnavashtaka kwatha 24. Rasna Saptaka Kwatha 25. Specific Gravity 26. Refractive Index 27. PH	
4	4.Practical Record Four Record books- for each record book 2.5 Marks	10
5	**5.Viva-Voce** **Structure of Viva** 1. Paribhasha – (2 questions 3 marks each) - 6 Marks 2. Shodhana, marana –(1 question from each 5 marks each) -10 Marks 3. Yantropakarana -–(2questions 3 marks each) - 6 Marks 4. Chemical composition Raasadravya -–(1 questions 2 marks each)-2 Marks 5. Therapeutic application of single drugs – (2 question 3 marks each) -6 marks 6. Yoga - (Shloka-3 marks; ingredients-5 marks: indications -5 marks	70

	dose & anupana-2Marks)-15Marks (Select the yoga having at least 5 ingredients) 7. Siddhi lakshana & quality control tests –(2 questions 5 marks each)-10 Marks 8. D& C act, GMP, FSSAI- 2 Marks 9. Viva on Non Lecture hour activity book-8 Marks 10. Communication skills -5 Marks	
6	**6. Internal assessment**	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	1. Adyatan Rasa Shastra	R.K. Goyal Chaukhamba Surbharati Prakashan, Varanasi
2	2.Ayurvediya Aushadhi gunadharma shastra	Vol I, II, III, IV, V, Gune Gangadharashastri, Gune Bandhu Prakashan
3	3. Asava Arishta Vigyanam	Dr. Pakshdhar Jha, Chaukhambha Sanskrit Sansthan, Varanasi
4	4. Ayurvediya Rasa Shastra	(Sachitra) Chandrabhusan Jha by Chaukhamba Surbharati Prakashan Varanasi, Reprint 2012
5	5.Ayurvediya Rasa Shastra	Prof. Siddhi Nandan Mishra, Chaukhamba Orientalia, Varanasi
6	6.Ayurved Prakash	Vaidya Gulraj Mishra. Chaukhambha Bharati Academy, Varanasi
7	7.Drugs and Cosmetic Act - 1940	Vijay Malik, Eastern Book Company Delhi
8	8. Pratyaksha Aushadh Nirmanam	Acharya Vishwanath Dwivedi
9	9.Rasa Tarangini	Sadanand Sharma,Motilal Banarasidas, Varanasi
10	10.Rasa Bhaishajya Kalpana Vigyan	Vaidya Santosh Kumar Khandal, Choukhamba Publishers, New Delhi
11	11.Rasa Ratna Samuchchaya (Hindi)	Dattattreya Ananta Kulkarni, Meharchand Lachamdas Publications,New Delhi
12	12.Rasendra Sara Sangraha	Vaidya Gopal Krishna, Chaukhambha Sanskrit Series of Varanasi
13	13.Ayurvediya Paribhasha	Indradev Tripathi Chaukhamba Orientalia, Varanasi
14	14.Sharangadhara Samhita	Radhakrishna Parashar Vaidyanath Ayurved Bhavan Pvt
15	15.Bharatiya Bhaishajya Kalpana Vigyana	Gananath Vishwanath Dwivedi Krishnadas Academy, Varanasi
16	16.Ayurvedic formulary of India	Govt. of India Ministry of Health & Family welfare New Delhi
17	17.Ayurvedic Pharmacopiea of India	CCRAS Govt. of India Ministry of Health & Family welfare New Delhi
18	18.Abhinava Bhaishajya Kalpana	Siddhi Nandan Mishra, Chaukhamba Surbharati Prakasha , Varanasi
19	19.Bhaishjya Ratnawali	Prof S N Mishra Choukhamba Publishers, Varanasi
20	20.Ayurvediya Rasashastra Ka Udbhava Evam Vikas	Satyendrakumar Arya, Krishnadas Academy, 1984

21	21.Yoga Ratnakar	Shri Laxmipathi Shastri, Chaukhambha Prakashana Varanasi, Reprint 2018
22	22.A Text book of Rasashastra	Prof. Parimi Suresh Chaukhambha Prakashak, Varanasi
23	23.Siddhoushadi Sangraha	Vaidyaratna G. A. Phadke, Ayurvedacharya, Satara, N. H Kolhatkar, Maharashtra mitra Mudranalaya, Shukravara peth, Satara
24	24.Application on standardised Namburi phased spot test in identification of Bhasma and Sindura preparations of Ayurveda published	Namburi Hanumantha Rao, CCRAS., New Delhi
25	25. Evidence based safety of Ayurvedic herbo-mineral formulations	Kumar Anhimanyu published by CCRAS, New Delhi
26	26. Introduction to Ayurvedic Pharmaceutics	Dr Devendra Joshi & Dr Geeta Joshi Chaukhambha Orientalia
27	27. A Handbook of Cosmetics	B. M. Mithal & R.N. Saha Published by Delhi Vallabh Prakashana
28	28. Sahasrayoga (Sanskrit and Hindi)	Reprint by CCRAS, New Delhi
29	29. Manual on Quality Parameters for Ayurveda & Siddha drugs	CCRAS, New Delhi
30	30.Safety and Prescription Trends of Rasaushadhis	Critical appraisal of Reported Medical Practices of Ayurveda Herbomineral formulations from CCRAS experience.
31	31. General Guidelines for Drug Development of Ayurvedic Formulations	CCRAS New Delhi, Volume I 1st Edn. 2018
32	32. General Guidelines for Safety/Toxicity Evaluation of Ayurvedic Formulations	CCRAS New Delhi, Volume II 1st Edn. 2018
33	33.General Guidelines for Clinical Evaluation of Ayurvedic Interventions	CCRAS New Delhi, Volume III 1st Edn. 2018
34	34. WHO internationalstandard terminologies on Ayurveda	WHO International Standard Terminology on Ayurveda, WHO 2022
35	35,Inorganic Pharmaceutical Chemistry	Gundu Rao P, Vallabha Prakashana
36	36, Organic Pharmaceutical Chemistry	Singh Harkishan;Kapoor V K, Vallabha Prakashana

37	37 Shlokavali of Rasashastra Bhaishajya Kalpana	Ninad Sathye;Shivaji Wavhal, Shantanu Prakashan Pune, 2009
38	38. Ansel"s Pharmaceutical Dosage Forms and Drug Delivery Systems	Loyd V Allen : Others, 9th volume, Lippincott Williams & Willkins Wolters Kluwer Co.2011
39	39. Laboratory Guide for the Analysis of Ayurveda and Siddha Formulations	Lavekar G S,Central Council For Research in Ayurveda & Siddha,2010
40	40. Pharmaceutics I & II	Mehta R M, Vallabha Prakashana, 2014
41	41.Central Drugs Standard Control Organization Directorate General of Health Services Ministry of Health & Family Welfare Government of India	https://cdsco.gov.in/opencms/opencms/en/Home/
42	42. FSSAI official website	https://www.fssai.gov.in/
43	43.PHARMACOPOEIA COMMISSION FOR INDIAN MEDICINE & HOMOEOPATHY OFFICIAL WEBSITE	https://pcimh.gov.in/

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Dravyaguna Vigyan

(SUBJECT CODE : AyUG-DG)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

DG

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-DG

Summary

Total number of Teaching hours: 400			
Lecture hours(LH)-Theory		150	150(LH)
Paper I	75		
Paper II	75		
Non Lecture hours(NLH)-Theory		250	250(NLH)
Paper I & II	75		
Non Lecture hours(NLH)-Practical			
Paper I & II	175		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

The Bachelor of Ayurveda education shall produce graduates having profound knowledge of Ashtanga Ayurveda. One of the chatushpada has been mentioned is Dravya. The revised syllabus of Dravyaguna along with the contemporary advances supplemented with knowledge of scientific and technological advances in Dravyaguna along with extensive practical training

Fundamentals of Dravyaguna involves a thorough knowledge of various principles and concepts of Rasapanchaka (fivefold analysis of medicinal substances) and Karma (pharmacological action). It refers to classical Ayurvedic texts, provides suitable examples, and includes contemporary interpretations to facilitate better understanding.Most commonly used dravyas by clinicians are included in curriculum.

The current syllabus focuses greater emphasis on understanding the fundamentals with a scientific interpretation and clinical application. The repetitive topics such as Ahara varga, Nighantu, and Jangama dravyas is avoided since they are covered in Samhita adhyayana (study of classical texts), Itihasa (history), and ethical considerations related to the clinical use of animal-origin drugs.

Additionally, newer areas in Ayurveda related to medicinal plants, such as cultivation techniques, collection methods, and various regulatory guidelines from organizations like NMPB (National Medicinal Plants Board), CCRAS (Central Council for Research in Ayurvedic Sciences), API (Ayurvedic Pharmacopoeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopoeia Commission for Indian Medicine & Homoeopathy), pharmacovigilance, Vrikshayurveda (science of plant life), Ethno medicine, Network pharmacology, and Bioinformatics, have been incorporated. This information is crucial for the sustainable use of medicinal plants and a better understanding of their properties.

Practical sessions in Dravyaguna focus on understanding fundamental concepts such as Mahabhuta (five elements), Guna (properties), Rasa (taste), and Virya (potency) with Parameters commonly used in physicochemical analysis.The curriculum also addresses challenges faced by the herbal drug industry, including the issue of adulteration, by incorporating quality check parameters. Furthermore, the students gain practical experience in plant identification through visits to various natural and cultivated plant habitats.

The revised curriculum for Dravyaguna reflects commitment to equipping students with the knowledge and skills necessary to excel in the field of Ayurvedic pharmacology. Hope that this curriculum will inspire and empower students to become proficient Ayurvedic practitioners who can contribute to the holistic well-being of individuals and society as a whole.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Paper 2 10
Table 3: Learning objectives (Theory) of Course 14
Paper 1 14
Paper 2 31
List of Practicals 34
Table 4: Learning objectives (Practical) 35
Practical 1 35
Table 4a: List of Practical 45
Activity 51
Table 5- Teaching learning method 58
Table 6: Assessment Summary: Assessment is subdivided in A to H points 59
6 A-Number of Papers and Marks Distribution 59
6 B - Scheme of Assessment (formative and Summative) 60
6 C - Calculation Method for Internal assessment Marks 61
6 D - Evaluation Methods for Periodical Assessment 61
6 E Question Paper Pattern 62
6 F Distribution of theory examination 63
Paper 1 63
Paper 2 64
6 G Blue print of paper I & II 66
6 H Distribution of Practical Exam 69
References Books/ Resources 71
Abbreviations 76

Course Code and Name of Course

Course code	Name of Course
AyUG-DG	Dravyaguna Vigyan

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-DG At the end of the course AyUG-DG, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate the application of principles of *Dravyaguna* in clinical practice.	PO1,PO2,PO8
CO2	Analyze and justify the fundamental principles of *Dravyaguna* in relevance to contemporary sciences.	PO1
CO3	Analyze and interpret *Rasa Panchaka* of *Dravya* with their application in clinical practice.	PO5,PO9
CO4	Interrelate the knowledge on Karma (pharmacological actions) with *Rasa panchaka* and basic contemporary clinical pharmacology.	PO2
CO5	Demonstrate and Justify the ability to select the specific *Dravyas*, Prashata Bheshaja with different dosage forms in different clinical conditions.	PO3,PO7,PO9
CO6	Demonstrate knowledge of quality control methods of drug.	PO3
CO7	Demonstrate knowledge and skills about *Apamishrana* (adulterants), *Abhava pratinidhidravya* (substitutes), *Prashastabheshaja* (ideal drug) and plant extracts.	PO5,PO6
CO8	Identify the medicinal plants and orient about conservation, cultivation, sustainable utilization & Pharmacovigilance	PO4,PO6
CO9	Demonstrate fundamental principles of applied Pharmacology.	PO2

Table 2 : Contents of Course

Paper 1 Fundamental Dravyaguna					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**1.Dravyaguna Vigyana**	1	1	1	1
2	**2.Dravya** • 2.1 Panchabhoutikatwa of Dravya • 2.2 Classification of Dravya based on Utpattibheda,Yonibheda, Prayogabheda, Prabhavbheda, Doshaghnabheda, Rasabheda and Karmbheda	1	6	5	4
3	**3. Guna** • 3.1 Panchabhoutikatva, characteristics and classification • 3.2 Gurvadiguna and its karma on Dosha, Dhatu and Mala, clinical application and research updates • 3.3 Paradiguna with examples, clinical applications and research updates	1	11	4	2
4	**4. Rasa** • 4.1 Meaning of “Rasa” in various contexts • 4.2 Shadrasa in relative correlation with taste of chemical constituents • 4.3 Rasotpatti and Panchabhoutika constitution of Shadrasa • 4.4 Rasopalabdhi and pathway of taste perception & sites of taste receptors in the body • 4.5 Rasa -Lakshana, Guna & Karmas of each Rasa on Dosha, Dhatu and Mala • 4.6 Atiyogalakshana, • 4.7 Clinical application and Research updates of Shadrasa • 4.8 Anurasa • 4.9 Rasa Sevanakrama of Aushadha	1	11	7	4

5	**5. Vipaka** • 5.1 Trividha Vipaka • 5.2 Vipak karma on Dosha, Dhatu and Mala • 5.3 Clinical application and Research updates • 5.4 Vipakopalabdhi (Determination of Vipaka) & Taratamya (Degree of variation)	1	6	3	1
6	**6. Virya** • 6.1 Difference between Guna and Virya • 6.2 Karmas of Virya on Dosha, Dhatu and Mala • 6.3 Clinical application and Research updates • 6.4 Viryaopalabdhi (Determination of Virya) and understanding of Virya with respect to actions of active constituents	1	6	2	2
7	**7. Prabhava** • 7.1 Samanapratyayarabdha and Vichitrapratyayarabdha • 7.2 Clinical application of Prabhava and Research updates	1	5	2	1
8	**8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava** • Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics	1	1	1	2
9	**9. Karma** • **9. Individual Karma, correlation with contemporary pharmacological action, examples, clinical application and research updates** • 9.1 Deepana • 9.2 Pachana	1	11	9	5

	• 9.3 Samshodhana • 9.4 Samshamana • 9.5 Anulomana • 9.6 Sransana • 9.7 Bhedana • 9.8 Rechana • 9.9 Chhedana • 9.10 Lekhana • 9.11 Grahi • 9.12 Sthambhana • 9.13 Madakari • 9.14 Pramathi • 9.15 Abhishyandi • 9.16 Vyavayi • 9.17 Vikashi • 9.18 Rasayana • 9.19 Vajeekarana • 9.20 Medhya				
10	**10. Karmas of Dashemani Gana**	1	5	12	3
11	**11. Principles of General Pharmacology** • **11 Drug definition, drug dosage forms, route of drug administration, pharmacokinetics (ADME), pharmacodynamics, Drug dose, principles of drug action, mechanism of drug action & bio-availability** • **11.1 Drugs Acting on Central Nervous System:** Anaesthetics, Sedative Hypnotics, Antiepileptics, Antiparkinsonian, Antidepressants, Antianxiety Drugs, Opioid - Analgesics Drugs • **11.2 Drugs Acting on Peripheral (somatic) Nervous System: Skeletal Muscle Relaxants, Local Anaesthetics** • **11.3 Autacoids and Related Drugs:** Nonsteroidal, Anti-inflammatory (NSAIDs)/Antipyretic and Analgesics Drugs • **11.4 Drugs for Respiratory Disorders:**Bronchodilators, Aerosols/ Inhalants Expectorants, Antitussive Drugs • **11.5 Cardiovascular Drugs:** Antihypertensive, Antianginal Drugs • **11.6 Drugs Acting on Kidney:** Diuretics • **11.7 Drugs Affecting Blood:** Haematinics, Coagulants, Anticoagulants, Hypolipidaemic Drugs	3	20	15	1

	• **11.8 Gastrointestinal Drugs:** Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal, Hepatoprotective Drugs • **11.9 Antibacterial Drugs:** Antibiotics, Antitubercular Drugs • **11.10 Antifungal, Antiviral, Antimalarial and Antihelmintic Drugs** • **11.11 Hormones and Related Drugs:** Thyroid Hormone, Thyroid Inhibitors, Insulin, Oral Anti-diabetic, Hormonal Contraceptives, Uterine Stimulants, Uterine Relaxants Drugs • **11.12 Miscellaneous Drugs:** Antiseptics and Disinfectants, Vaccines, Vitamins, Water imbalance and IV fluids				
12	**12. Mishraka Gana** • **12. Mishrakagana: its composition, guna karma and therapeutic uses.** • **12.1 Brihatpanchamoola.** • **12.2 Laghupanchamoola.** • **12.3 Vallipanchamoola.** • **12.4 Kantakapanchamoola.** • **12.5 Trinapanchamoola.** • **12.6 Panchavalkala.** • **12.7 Triphala.** • **12.8 Trikatu.** • **12.9 Trimada.** • **12.10 Chaturusana.** • **12.11 Panchakola.** • **12.12 Shadusana** • **12.13 Chaturbeeja.** • **12.14 Trijataka.** • **12.15 Chaturajataka.** • **12.16 Panchatikta.** • **12.17 Chaturbhadra.** • **12.18 Trikarshika.**	3	6	6	2
13	**13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany**	3	1	0	2
14	**14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy**	3	1	1	2

15	**15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices)**	3	1	1	0
16	**16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.**	3	1	1	0
17	**17. Abhava Pratinidhi Dravya (substitutes)**	3	1	1	1
18	**18. Classifications and techniques of aqueous and alcoholic extracts**	3	1	0	2
19	**19. Adverse drug reaction and Pharmacovigilance with recent updates**	3	1	1	2
20	**20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy)**	3	1	1	0
21	**21. Vrikshayurveda and Ethno-medicine**	3	1	1	1
22	**22. Network pharmacology and Bioinformatics**	3	2	1	1
Total Marks			**100**	**75 hr**	**39 hr**

Paper 2 Applied Dravyaguna					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
23	**1. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis)**	2	5	1	6
24	**2.1 Dravya (Drug) Nama-Guna-Karma Jnana**	2	55	45	10

	• Amalaki • Aragwadha • Arjuna • Ashoka • Ashwagandha • Ativisha • Bala • Beejaka • Bhallataka • Bharangi • Bhrungaraja • Bhumyamalaki • Bilva • Brahmi • Chandana • Chitraka • Dadima • Dhataki • Dhamasa • Eranda • Gokshura • Guduchi • Guggulu • Haridra • Haritaki • Hingu • Jambu • Jatamansi • Jyotishmati • Kanchanara • Kantakari • Kapikachhu • Karkatshrungi • Katuki • Khadira • Kumari • Kutaja • Latakaranja • Lodhra • Agnimanth • Ahiphena (NK) • Ajamoda *(DK)* • Apamarga (DK) • Asthishrunkhala • Bakuchi • Bruhati • Chakramarda • Dhanyaka • Ela • Gambhari					

	• Japa • Jatiphala • Jeeraka (DK) • Kalamegha • Kampillaka • Kulatha *(NK)* • Kumkum • Lajjalu • Lavanga				
25	**2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana** • Madanphala • Mandukaparni • Manjishta • Maricha • Meshashrungi • Methika • Musta • Nagkeshar • Nimba • Nirgundi • Palasha • Pashanabheda • Patha • Pippali • Punarnava • Rasna • Rasona • Sarapagandha • Sairayak • Sariva • Shallaki • Shalmali(Mocharasa) • Shankhapushpi • Shatavari • Shigru • Shunthi • Talisapatra *(NK)* • Trivrut • Tulasi • Twak • Usheera • Vacha • Varuna • Vasa • Vatsanabha	3	40	29	20

	• Vibhitaki • Vidanga • Yashtimadhu				
Total Marks			**100**	**75 hr**	**36 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1 Fundamental Dravyaguna									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1.Dravyaguna Vigyana (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO3	Define Dravyaguna Vigyana.	CK	MK	K	L&PPT	P-VIVA	F&S	I	
CO1,CO3	Explain the role of Dravyaguna Vigyana in clinical practice.	CC	MK	KH	L&GD	P-VIVA,C-INT	F&S	I	
Topic 2 2.Dravya (Lecture :5 hours, Non lecture: 4 hours)									
CO1,CO5,CO8	Classify Dravya based on Utpatti,Yonibheda, Prayogabheda & Prabhavbheda.	CK	MK	K	L&PPT,LS	T-OBT,P-VIVA,P-POS	F&S	I	
CO1,CO5,CO8	Classify Dravya based on Doshaghnabheda, Rasabheda, Karmbheda (Dashemani & Sushrutokta Gana)	CK	MK	K	L&PPT,LS	T-OBT,P-VIVA,P-POS	F&S	I	
CO1,CO3	Describe Panchabhoutikatwa of Dravya.	CC	MK	KH	DIS,PER	T- EW,T-OBT,P-VIVA	F&S	I	
Topic 3 3. Guna (Lecture :4 hours, Non lecture: 2 hours)									

CO1,CO2,CO 3	Define Guna and describe its Panchabhoutikatva.	CK	MK	K	L&PPT,DIS,LS	T- EW,P-VIVA,PRN,QZ	F&S	I	
CO1	State characteristics of Gurvadi Guna.	CK	MK	K	L&PPT,SDL	P-VIVA,PRN,QZ	F&S	I	
CO1,CO2,CO 3	Discuss Gurvadiguna in context to its Karma on Dosha, Dhatu and Mala with examples.	CC	MK	KH	L&PPT,L&GD,FC	T- EW,P-VIVA,PRN,OSPE	F&S	I	
CO1,CO2,CO 3	Enumarate & Summarize, clinical application of Gurvadi Guna with research updates.	CC	MK	KH	L&GD,BL,LS	T- EW,P-VIVA,PRN	F&S	I	
CO1,CO2,CO 3	Enlist Paradiguna with examples.	CK	MK	K	L&GD,PER	T-EMI,P-VIVA,PRN,P-POS	F&S	I	
CO1,CO2,CO 3	Interpret clinical applications of Paradiguna.	CAP	MK	KH	L&PPT,DIS	T-EMI,P-VIVA,PRN,QZ	F&S	I	
CO1,CO2,CO 3	Discuss research updates of Paradiguna.	CC	MK	KH	L,TPW,LS	T-EMI,P-VIVA,PRN,CR-RED	F&S	I	
Topic 4 4. Rasa (Lecture :7 hours, Non lecture: 4 hours)									
CO1,CO2,CO 3	Define Rasa and interpret Meaning of “Rasa” in various contexts.	CK	MK	K	L&GD	P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2	Classify and compare shadarasa in relative correlation with taste of chemical constituents.	CK	MK	K	L&PPT,ED	P-VIVA,PUZ,M-CHT,INT	F&S	I	

					U				
CO1,CO2	State Rasa Utpatti and Panchabhoutika constitution of Shadrasa.	CK	MK	K	L&GD,PER	P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2	Discuss Rasopalabdhi.	CC	MK	KH	L&GD,SDL	P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2,CO3	Interpret pathway of taste perception & sites of taste receptors in the body	CC	MK	KH	L&PPT,L_VC	T- EW,T-OBT,P-VIVA,PRN,PUZ,INT	F&S	I	
CO1,CO2	Describe Guna and Lakshana of each Rasa.	CC	MK	KH	L&PPT	T-EMI,T- EW,P-VIVA,PRN,INT	F&S	I	
CO1,CO2	Explain karma of each rasa on Dosha, Dhatu and Mala with examples.	CC	MK	KH	L&PPT,BS	T-EMI,T- EW,P-VIVA,PUZ,M-CHT,INT	F&S	I	
CO1,CO2	Discuss Atiyoga of each rasa.	CC	MK	KH	L&PPT,PBL,PER	T-EMI,P-VIVA,PRN,PUZ,INT	F&S	I	
CO1,CO2,CO3	Interpret Clinical application of each rasa.	CAP	MK	KH	L&PPT,DIS,SDL,LS	T-EMI,T- EW,T-OBT,P-VIVA,INT	F&S	I	
CO1,CO2	Discuss research updates of Shadrasa.	CC	MK	KH	DIS,SDL,LS	T- EW,P-VIVA,PUZ,INT,CR-RED	F&S	I	

CO1,CO2	Define Anurasa.	CK	MK	K	L,LS	T-EMI,P-VIVA,INT	F&S	I	
CO1,CO2	Interpret relevance of Anurarasa in clinical practice.	CAP	MK	KH	L&GD,FC	T-EMI,P-VIVA,PUZ,INT	F&S	I	
CO1,CO2	Describe with justification Rasa sevanakrama as Aushadha.	CC	MK	KH	L&PPT,DIS	T-EMI,T- EW,P-VIVA,PRN,M-CHT,M-POS	F&S	I	
Topic 5 5. Vipaka (Lecture :3 hours, Non lecture: 1 hours)									
CO1	Define Vipaka.	CK	MK	K	L	P-VIVA	F&S	I	
CO1	State Vipaka lakshana.	CK	MK	K	L&GD	P-VIVA,INT	F&S	I	
CO1	Describe the action of Trividha Vipaka on Dosha, Dhatu and Mala with examples.	CC	MK	KH	L&PPT,TPW,FC	T- EW,P-VIVA,PRN	F&S	I	
CO1,CO3	Interpret clinical application of Vipaka.	CAP	MK	KH	L&PPT,DIS,SDL,LS	P-VIVA,QZ	F&S	I	
CO2	State Research updates of Vipaka.	CK	MK	K	L&PPT	P-VIVA,CR-RED	F&S	I	
CO1	Explain Vipakopalabdhi (Determination of Vipaka) and Taratamya (Degree of variation).	CC	MK	KH	L&PPT,FC	P-VIVA,PUZ,M-CHT	F&S	I	
Topic 6 6. Virya (Lecture :2 hours, Non lecture: 2 hours)									
CO1	Define the lakshanas of Virya.	CK	MK	K	L,SD	P-VIVA,INT	F&S	I	

					L				
CO1	Differentiate Guna and virya.	CC	MK	KH	L&PPT,RP	P-VIVA,P-EXAM,O-QZ	F&S	I	
CO1	Discuss Karma of Virya on Dosha, Dhatu and Mala.	CC	MK	KH	L&PPT,SDL,PL	P-VIVA,O-QZ,M-CHT	F&S	I	
CO1,CO3	Explain clinical application of Virya.	CC	MK	KH	L&PPT,GBL,TUT	P-VIVA,O-QZ,INT	F&S	I	
CO2	Discuss research updates of Virya.	CC	MK	KH	L&GD,DIS,SDL	P-VIVA,P-EXAM,O-QZ,CR-RED	F&S	I	
CO1	Discuss Viryaopalabdhi (Determination of Virya).	CC	MK	KH	L&GD	P-VIVA,QZ	F&S	I	
Topic 7 7. Prabhava (Lecture :2 hours, Non lecture: 1 hours)									
CO1	Define and explain Prabhava with examples.	CC	MK	KH	L&PPT	P-VIVA	F&S	I	
CO1	Describe Samanapratyayarabdha and Vichitrapratyayarabdha with examples.	CC	MK	KH	L&PPT,DIS,TBL,BL	T- EW,P-VIVA,INT	F&S	I	
CO3	Explain clinical application of Prabhava.	CC	MK	KH	L&GD,FC,LS	T- EW,P-VIVA,CR-RED	F&S	I	

CO1,CO2	Discuss research updates of Prabhava.	CC	MK	KH	L&GD,SDL	T- EW,P-VIVA,CR-RED	F&S	I	
Topic 8 8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava (Lecture :1 hours, Non lecture: 2 hours)									
CO1	Interpret the interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics.	CAP	MK	KH	L&PPT,TPW,PL	P-VIVA,CL-PR	F&S	I	
Topic 9 9. Karma (Lecture :9 hours, Non lecture: 5 hours)									
CO1	Define Karma.	CK	MK	K	L	T-OBT,P-VIVA,QZ	F&S	I	
CO1	Discuss Karma lakshana.	CC	MK	KH	L&GD	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO4,CO5	Explain Deepan karma in relation with Appetizers.	CC	MK	KH	L&GD,BL	T- EW,T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	Critically analyze Deepan dravyas with its gunas and application in various clinical conditions.	CAP	MK	KH	L&PPT,PBL,GBL	T-OBT,P-VIVA,QZ,DEB	F&S	I	
CO1,CO2,CO3,CO4	Explain Pachan karma in relation with Digestives.	CC	MK	KH	L&PPT	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	Critically analyze Pachan dravyas with gunas and discuss its application in various clinical conditions.	CAN	MK	KH	L&PPT,PBL,PER	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO	Explain Samshodhan karma in relation with contemporary	CC	MK	KH	L_VC	T-OBT,P-	F&S	I	

4	pharmacological action.				,PL	VIVA,QZ			
CO1,CO3,CO 4	Discuss Samshohan karma and its clinical application.	CC	MK	KH	PBL, RP,PE R	T- EW,T-CS,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO 3,CO4	Explain Samshamana karma in relation with contemporary pharmacological action.	CC	MK	KH	L&G D,BL	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO 3,CO4	Describe Samshamana karma and its clinical application.	CC	MK	KH	L&PP T,CB L,PL	T-EMI,T-CS,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3	Explain Anuloman karma in relation with Carminative.	CC	MK	KH	L_VC ,DIS	T-EMI,T-OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	Describe Anuloman karma and its clinical application.	CC	MK	KH	L&PP T,PB L,LS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3,CO4	Explain Sransana karma in relation with contemporary pharmacological action.	CC	MK	KH	L&PP T	T-EMI,T-OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	Discuss Sransan karma and its clinical application.	CC	MK	KH	L&PP T,PB L,LS	T-OBT,P-VIVA,QZ ,DEB	F&S	I	
CO1,CO2,CO 3,CO4	Explain Bhedana karma in relation with strong laxative action	CC	MK	KH	L_VC ,FC	T-EMI,T-OBT ,P-VIVA,DEB	F&S	I	
CO1,CO3	Discuss Bhedan karma and its clinical application.	CC	MK	KH	L&PP T,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO 3,CO4	Explain Rechan karma in relation with Purgative.	CC	MK	KH	L&PP T	T-EMI,T-OBT,P-VIVA	F&S	I	

CO1,CO3	Discuss Rechan karma and its clinical application.	CC	MK	KH	L&PPT,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO3	Discuss Chhedan karma and its clinical application.	CC	MK	KH	L&PPT,CBL,LS	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO2,CO3,CO4	Explain Lekhan karma in relation with contemporary pharmacological action.	CC	MK	KH	L&GD,BL	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO3	Discuss Lekhan karma and its clinical application.	CC	MK	KH	L&PPT,DIS,PL	T-OBT,P-VIVA,QZ,DEB	F&S	I	
CO1,CO2,CO3,CO4	Explain Grahi karma in relation with contemporary pharmacological action bowel binding.	CC	MK	KH	L_VC	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1,CO3	Discuss of Grahi karma and its clinical application.	CC	MK	KH	L&GD,TBL	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3,CO4	Explain Stambhan karma in relation with contemporary pharmacological action.	CC	MK	KH	L&PPT,FC	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1,CO3	Discuss Stambhan karma and its clinical application.	CC	MK	KH	L&GD,PBL	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1	Discuss Madakari karma with examples.	CC	MK	KH	L,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO3	Discuss Pramathi karma and its clinical application.	CC	MK	KH	L&PPT,DIS	T-EMI,T-OBT,P-VIVA	F&S	I	
CO1	Discuss Abhishyandi karma with examples.	CK	MK	K	L,DIS	T-EMI,T-OBT	F&S	I	

						,P-VIVA,DEB			
CO1	Discuss Vyavayi karma with examples.	CC	MK	KH	L,PER	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1	Discuss Vikashi karma with examples.	CC	MK	KH	L,DIS	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2	Explain Rasayan karma in relation with Rejuvenators.	CC	MK	KH	L&PPT,DIS,BL	T-EMI,P-VIVA,QZ	F&S	I	
CO1,CO3	Analyze types of Rasayan dravyas with its gunas and discuss its clinical application with research updates.	CAN	MK	KH	L&GD	T-EMI,T-OBT,P-VIVA,DEB,CR-RED	F&S	I	
CO1,CO2	Explain Vajeekaran karma in relation with Aphrodisiacs.	CC	MK	KH	L&GD,PL	T-OBT,P-VIVA,QZ	F&S	I	
CO1,CO2,CO3	Critically Analyze the types of Vajeekaran dravyas with their guna karmas and discuss its clinical application with research updates	CAN	MK	KH	L&PPT,PBL,ML,LS	T-OBT,P-VIVA,QZ,DEB,CR-RED	F&S	I	
CO1,CO2	Explain Medhya karma in relation with contemporary pharmacological actions.	CC	MK	KH	L&PPT	T-EMI,T-OBT,P-VIVA,DEB	F&S	I	
CO1,CO2,CO3	Critically analyze Medhya dravya and discuss its clinical application with research updates.	CAN	MK	KH	L&PPT,PL,PER	T-OBT,P-VIVA,QZ,WP,CR-RED	F&S	I	
Topic 10 10. Karmas of Dashemani Gana (Lecture :12 hours, Non lecture: 3 hours)									
CO1,CO8	Discuss Charakokta Dashemani karmas with their rasa, guna, vipak, virya, dhosha karma, botanical identity & pharmaco-	CC	MK	KH	L&PPT,DIS	P-VIVA,P-REC,QZ ,M-	F&S	I	

	therapeutic action of individual drugs.				,FC,REC	CHT,M-POS			
Topic 11 11. Principles of General Pharmacology (Lecture :15 hours, Non lecture: 1 hours)									
CO4,CO9	Define Pharmacology and discuss Principles of general Pharmacology.	CK	MK	K	L&PPT	PRN,QZ	F&S	I	
CO4,CO9	Discuss drug definition, drug dosage forms and route of drug administration.	CC	MK	KH	L_VC	T- EW,P-VIVA,QZ	F&S	I	
CO4,CO9	Explain pharmacokinetics (ADME) drug and pharmacodynamics.	CC	MK	KH	L_VC,DIS	P-VIVA,PRN	F&S	I	
CO4,CO9	Discuss Drug dose, Principles of drug action, Mechanism of drug action & Bioavailability	CC	MK	KH	L_VC,PER	P-VIVA,QZ	F&S	I	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on CNS with examples of Anaesthetics, Sedative-Hypnotic, Antiepileptic, Antiparkinsonian, Antidepressants, Antianxiety and Opioid Analgesics Drugs	CC	MK	KH	L&PPT,PBL,PrBL,FC	T- EW,T-OBT,P-VIVA,QZ,C-INT	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Peripheral (somatic) Nervous System with examples of Skeletal Muscle Relaxants and Local Anaesthetics Drugs.	CC	MK	KH	L&PPT,PBL,FC	T- EW,T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Autacoids and Related of Nonsteroidal Antiinflammatory (NSAIDs), Antipyretic and Analgesics Drug	CC	MK	KH	L&PPT,PBL,FC	T- EW,T-OBT,P-VIVA,PRN	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Respiratory Disorders -	CC	MK	KH	L&PPT,PB	T-OBT,P-VIVA,PRN	F&S	III	

	Bronchodialators, Aerosols/ Inhalants, Expectorants and Anti tussives Drugs				L,BL				
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Cardiovascular Drugs as Antihypertensive and Antianginal Drugs	CC	MK	KH	L_VC ,FC	T-OBT,P-VIVA,PRN	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Kidney as Diuretics	CC	MK	KH	L&PPT,TPW,BL	T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Haematinics, Coagulants, Anticoagulants and Hypolipidaemic Drugs	CC	MK	KH	L&PPT,PBL,BL	T- EW,T-OBT,P-VIVA	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Gastrointestinal tract as Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal and Hepatoprotective Drugs	CC	MK	KH	L&PPT,L&GD,L_VC	T- EW,T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as Antibiotics and Antitubercular.	CC	MK	KH	L&PPT,FC,GBL	T- EW,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting as **Antifungal, Antiviral, Antimalarial and Anthelmintic Drugs**	CC	MK	KH	L&PPT,PBL,GBL	T- EW,T-OBT,P-VIVA,QZ	F&S	III	
CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on Hormones and Related Drugs as Thyroid Hormone, Thyroid Inhibitors, Insulins, Oral Antidiabetic, Hormonal Contraceptives, Uterine Stimulants and Uterine Relaxants Drugs.	CC	MK	KH	L&PPT,BL,PER	T- EW,T-OBT,P-VIVA,PRN	F&S	III	

CO9	Define, Describe mode of action & Discuss types with examples of following drugs acting on as Antiseptics , Disinfectants, Vaccines, Vitamins, Water imbalance and IV	CC	MK	KH	L&PPT,BL, PER	T- EW,T-OBT,P-VIVA	F&S	III	
Topic 12 12. Mishraka Gana (Lecture :6 hours, Non lecture: 2 hours)									
CO1,CO3	Explain Brihatpanchamoola composition.	CC	MK	KH	L&PPT,EDU	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Brihatpanchamoola.	CC	MK	KH	L&PPT,DIS ,TBL	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Explain Laghupanchamoola composition.	CC	MK	KH	L&GD	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Laghupanchamoola.	CC	MK	KH	L&PPT,DIS ,PL	T- EW,P-VIVA,P-POS,QZ	F&S	III	
CO1,CO3	Explain Vallipanchamoola composition.	CC	MK	KH	L&PPT	T- EW,P-VIVA,P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Vallipanchamoola.	CC	MK	KH	L&GD,PER	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Kantakapanchamoola composition.	CC	MK	KH	L&PPT,BS,	T- EW,P-VIVA,QZ	F&S	III	

					TPW				
CO1,CO3	Describe Guna karma and combined therapeutic effect of Kantakapanchamoola.	CC	MK	KH	L&PPT,LS, PER	P-POS,QZ ,M-CHT	F&S	III	
CO1,CO3	Explain Trinapanchamoola composition.	CC	MK	KH	L_VC ,PER	P-VIVA,P-EXAM,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trinapanchamoola.	CC	MK	KH	L&PPT,CBL,PL	T- EW,P-VIVA,M-CHT	F&S	III	
CO1,CO3	Explain Panchavalkala composition.	CC	MK	KH	L&PPT,BL, GBL	P-VIVA,P-POS,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchavalkala.	CC	MK	KH	L&PPT,FC	T-CS,T-OBT, P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Triphala composition	CC	MK	KH	L,DIS	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Triphala.	CC	MK	KH	L&PPT,PER	T-OBT,P-VIVA,P-EXAM,QZ	F&S	III	
CO1,CO3	Explain Trikatu composition.	CC	MK	KH	L&PPT,PL	T-EMI,P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trikatu	CC	MK	KH	L&PPT,PL	T-OBT,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Trimada composition	CC	MK	KH	L,DIS	T- EW,P-VIVA,QZ	F&S	III	

CO1,CO3	Describe Guna karma and combined therapeutic effect of Trimada.	CC	MK	KH	L&PPT,DIS,TUT	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Chaturusana composition.	CC	MK	KH	L&PPT	T-OBT,P-VIVA,P-POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturusana.	CC	MK	KH	L&PPT,FC	P-VIVA,P-POS,QZ	F&S	III	
CO1,CO3	Explain Panchakola composition.	CC	MK	KH	L&PPT,L_VC	P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchakola.	CC	MK	KH	L&PPT,DIS	T- EW,T-CS,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Shadusana composition.	CC	MK	KH	L&PPT,PL	T-OBT,P-VIVA,P-POS	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Shadusana	CC	MK	KH	L&PPT,FC	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Chaturbeeja composition.	CC	MK	KH	L&PPT,L_VC	T-OBT,P-VIVA,P-EXAM	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturbeeja	CC	MK	KH	L&PPT,PER	T- EW,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Trijataka composition.	CC	MK	KH	L_VC,DIS,SDL	T-OBT,P-VIVA,P-EXAM,P-POS	F&S	III	

CO1,CO3	Describe Guna karma and combined therapeutic effect of Trijataka	CC	MK	KH	L&PPT,PL	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Chaturajataka composition.	CC	MK	KH	L_VC,PER	T-OBT,P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturajataka.	CC	MK	KH	L&PPT,DIS	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Panchatikta composition.	CC	MK	KH	L&PPT,FC	T-OBT,P-VIVA,P-REC,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Panchatikta.	CC	MK	KH	L&PPT,PL	T- EW,P-VIVA,P-POS	F&S	III	
CO1,CO3	Explain Chaturbhadra composition.	CK	MK	K	L,DIS	T-OBT,P-VIVA,QZ	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Chaturbhadra.	CC	MK	KH	L&PPT,FC	T-EMI,P-VIVA,QZ	F&S	III	
CO1,CO3	Explain Trikarshika composition.	CC	MK	KH	L,DIS	T-OBT,P-VIVA,P-EXAM	F&S	III	
CO1,CO3	Describe Guna karma and combined therapeutic effect of Trikarshika.	CC	MK	KH	L&PPT,DIS,PL	T-OBT,P-VIVA,QZ	F&S	III	
Topic 13 13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany (Lecture :0 hours, Non lecture: 2 hours)									
CO1	Describe the Nomenclature of dravya as per Raj Nighantu.	CC	MK	KH	L&PPT,FC,RP	P-VIVA,PRN,P-ID,QZ	F&S	III	
CO1	Explain the Nomenclature of dravya as per Vedic taxonomy.	CC	MK	KH	L&PPT	P-VIVA,P-ID,QZ	F&S	III	

CO1	Discuss the Nomenclature of dravya as per botany.	CC	MK	KH	L&PPT,BL,PER	P-VIVA,P-ID,QZ	F&S	III	
Topic 14 14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy (Lecture :1 hours, Non lecture: 2 hours)									
CO1,CO5	Describe Prashasta Bheshaja.	CC	MK	KH	L&GD,PL	P-VIVA,QZ	F&S	III	
CO1,CO5	Explain Bheshaja Pariksha of Charaka samhita vimana sthana.	CC	MK	KH	L&GD,SDL,LS	P-VIVA,QZ,M-CHT	F&S	III	
CO1,CO5	Discuss drug evaluation method in correlation with Pharmacognosy.	CC	MK	KH	L&PPT,DIS	P-VIVA,QZ	F&S	III	
Topic 15 15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices) (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2	Discuss Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices).	CC	DK	KH	L&PPT,PER	P-VIVA,PUZ,CHK	F&S	III	
CO1,CO2	Discuss Drug collection methods as per GFCP (Good Field collection practices).	CC	DK	KH	L&PPT,DIS,PrBL	P-VIVA,PUZ,CHK	F&S	III	
Topic 16 16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants. (Lecture :1 hours, Non lecture: 0 hours)									
CO2	Discuss good cultivation practices, seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.	CC	DK	KH	L&PPT,L_VC,FC	P-VIVA,M-POS	F&S	III	

Topic 17 17. Abhava Pratinidhi Dravya (substitutes) (Lecture :1 hours, Non lecture: 1 hours)									
CO1,CO7	Discuss the concept of Abhava pratinidhi dravya (substitutes) as per Bhavaprakasha.	CC	MK	KH	L&G D,BS, EDU	P-VIVA,QZ	F&S	III	
Topic 18 18. Classifications and techniques of aqueous and alcoholic extracts (Lecture :0 hours, Non lecture: 2 hours)									
CO2,CO6	Appraise the techniques of aqueous and alcoholic extracts of medicinal plants.	CC	DK	KH	L_VC ,D	P-VIVA,DOPS	F&S	III	
Topic 19 19. Adverse drug reaction and Pharmacovigilance with recent updates (Lecture :1 hours, Non lecture: 2 hours)									
CO2,CO8	Explain adverse drug reaction and pharmacovigilance in ayurveda with recent updates.	CC	MK	KH	L&PP T,L& GD,L S	P-VIVA,PRN, QZ ,M-CHT	F&S	III	V-RS
Topic 20 20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy) (Lecture :1 hours, Non lecture: 0 hours)									
CO2	State NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine) and PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy).	CK	NK	K	SDL	P-VIVA,QZ ,INT	F&S	III	
Topic 21 21. Vrikshayurveda and Ethno-medicine (Lecture :1 hours, Non lecture: 1 hours)									
CO2	Explain concept of Vrikshayurveda and Ethno medicine.	CC	NK	KH	L&G D,ML ,PER	P-VIVA,CR-RED	F&S	III	
Topic 22 22. Network pharmacology and Bioinformatics (Lecture :1 hours, Non lecture: 1 hours)									

CO2	Describe Network Pharmacology and Bioinformatics.	CC	NK	KH	L&G D,SD L,LS	P-VIVA,CR-RED	F&S	III	

Paper 2 Applied Dravyaguna									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 1. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis) (Lecture :1 hours, Non lecture: 6 hours)									
CO5	Interpret the selection of appropriate drugs in different vyadhis as per criteria's mentioned in Bheshajavacharaniya (as per As. Sa. Su 23)	CAP	MK	KH	L&PPT,CBL,PrBL,SDL	T- EW,P-VIVA,QZ	F&S	II	H-RN,H-SW
Topic 2 2.1 Dravya (Drug) Nama-Guna-Karma Jnana (Lecture :45 hours, Non lecture: 10 hours)									
CO3	Specify useful parts with its Rasapanchaka of following drugs.	CK	MK	K	L&GD,CBL,FC	T-OBT,P-VIVA	F&S	II	
CO4	Describe karma,agryakarma and dosha karma of following drugs.	CC	MK	KH	L&PP	T-EMI,T-OBT	F&S	II	

					T,DIS ,ML	,P-VIVA,QZ			
CO5	Explain Amayikaprayoga used in Vyadhi (Disease) pertaining to various Srotas and Vyadhiavastha (Stage).	CC	MK	KH	L&G D,BS, CBL	T-EMI,T-OBT,P-VIVA	F&S	II	
CO5	Indicate the Kalpana (dosage form), Matra (Dose), Anupana (Vehicle), Marga(Route), Sevana kala (Time of administration), Kalavadhi (Duration) and Pathya-pathya) of following drugs.	CAP	MK	KH	L&PP T,DIS ,GBL	T-EMI,T-OBT ,P-VIVA,PRN	F&S	II	V-RS, H-SW
CO2	Enlist active phyto-constituents & important formulations Discuss research updates of following drugs.	CK	MK	K	L&PP T,ML	T-OBT,P-VIV A,CR-RED	F&S	II	
CO8	Enlist botanical name & family. Explain main synonyms as per Bruhatryees and Bhavaprakasha.Vernacular name (Hindi,English and local name) of following drugs.	CK	MK	KH	L&PP T,DIS	T-OBT,P-VIVA,QZ ,O-QZ	F&S	II	
CO8	Demonstrate external morphology-habit, root, leaf, stem, flower, inflorescence, fruit, seed and officinal useful parts of following drugs.	CC	MK	KH	L_VC ,DIS, BS	T-OBT,P-VIVA,O-QZ	F&S	II	
CO7	Describe varieties, grahyagrahyatwa Adulterants, substitute and toxic effects of following drugs wherever applicable	CC	MK	KH	L&G D	T- EW,T-OBT ,P-VIVA,QZ	F&S	II	H-AT
Topic 3 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana (Lecture :29 hours, Non lecture: 20 hours)									
CO3	Specify useful parts with its Rasapanchaka of following drugs	CK	MK	K	L&PP T,DIS	T-EMI,T-OBT ,P-VIVA,QZ	F&S	III	
CO4	Describe karma, agryakarma and dosha karma of following drugs.	CC	MK	KH	L&PP T,DIS ,BS	T-OBT,P-VIVA,QZ	F&S	III	
CO5	Explain Amayikaprayoga used in Vyadhi (Disease) pertaining to	CC	MK	KH	L&PP	T-OBT,P-	F&S	III	

	various Srotas and vyadhiavastha (Stage).				T,DIS ,CBL	VIVA,QZ			
CO5	Indicate the Kalpana(dosage form), Matra (Dose), Anupana (Vehicle), Marga (Route), Sevana kala (Time of administration), Kalavadhi (Duration) and Pathya-pathya) of following drugs.	CAP	MK	KH	L&PP T,DIS ,ML	T-EMI,P-VIVA	F&S	III	V-RS, H-SW
CO2	Enlist active phyto-constituents & important formulations. Discuss research updates of following drugs.	CK	MK	K	L&G D,BS	T-EMI,T-OBT ,P-VIVA,QZ	F&S	III	
CO8	Enlist botanical name & family. Explain main Synonyms as per Bruhatryees and Bhavaprakasha. Vernacular name (Hindi, English and local name) of following drugs.	CK	MK	K	L&G D,FC, ML	T-OBT,P-VIVA,QZ	F&S	III	
CO8	Demonstrate external morphology-habit, root, leaf, stem, flower, inflorescence, fruit, seed and officinal useful parts of following drugs.	CC	MK	KH	L_VC ,ML	T-OBT,P-VIVA,QZ	F&S	III	
CO7	Describe varieties, grhyahrahyatwa, adulterants, substitute and toxic effects of following drugs wherever applicable.	CC	MK	KH	L&PP T,DIS ,EDU	T-EMI,T-OBT ,P-VIVA,PUZ	F&S	III	H-AT

List of Practicals(Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	1. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests	1	10
2	2. Assessment of objective parametric measures of Guna	1	12
3	3. Assessment of Rasa	1	6
4	4.Comparative organoleptic and macroscopic examination	1	23
5	5. Microscopic Identification of genuine and adulterated drug	1	4
6	6. Demonstration of skills to identify the medicinal plants in the college garden.	1	10
7	7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration)	1	10
8	8. Dravya prayoga	1	12
9	9. Physico-chemical study	2	8
10	10. Phytochemical	2	4
11	11. Thin Layer Chromatography (TLC) technique	2	2
12	12. Demonstration of skills to identify the medicinal plants in the college garden	2	10
13	13. Out campus visit (cultivated gardens & In-situ plant demonstration)	2	10
14	14. Ekala dravya prayoga	2	10
15	15. Different Cultivation technique including methods mentioned in Vrikshayurveda	2	6
16	16. Exercise on Network pharmacology	3	6
17	17. Preparations of digital herbarium	3	2
18	18. Demonstration of skills to identify the medicinal plants in the college garden	3	10
19	19. Out campus visit (cultivated gardens & In-situ plant demonstration)	3	10
20	20. Ekala dravya prayoga	3	10

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 1. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests									
CO1,CO6	Observe the objective parametric measures to understand the relation between Parthivatwa by Density (bulk) of Asthishrnkhala, Sariva,Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira.	PSY-GUD	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measures to understand the relation between Jaliyatwa by Viscosity, Moisture content of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga.	PSY-GUD	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measures to understand the relation between Aagneyatwa by Moisture content of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandana.	PSY-GUD	MK	KH	PT	P-VIVA	F&S	I	
CO1,CO6	Observe the objective parametric measures to understand the relation between Vayaviyatwa by Fat content & Bulk density of Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	

CO1,CO6	Observe the objective parametric measures to understand the relation between Aakashiyatwa by Bulk density of Usheera, Kumari, Apamarga, Jeeraka & Jatamansi.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Participate in the methods of specific gravity (Solid) and bulk desity of Asthishrukhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhum & Ushir by objective parameters measures to understand the relation between Parthivatwa.	AFT-RES	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Follow the methods of Viscosity, Moisture content & Specific gravity (Liquid) of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga by objective parameters measures to understand the relation between Jaliyatwa.	AFT-REC	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Descibe the methods of pH and Moisture content of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandan by objective parameters measures to understand the relation between Agneeyatwa.	AFT-REC	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Answer to the methods of Fat content , Specific gravity (liquid) & Bulk density of Usheera, Ashwagandha, Nimba, Vidari, Tila, Jambu & Kapikachhu by objective parameters measures to understand the relation between Vayaviyatwa.	AFT-RES	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Follow the methods of Bulk density of Ushira, Kumari, Apamarga, Jeeraka & Jatamansi by objective parameters measures to understand the relation between Akashiyatwa	AFT-REC	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Perform the objective parametric measures to understand the relation between Parthivatwa by Specific gravity (solid) of Asthishrnkhala, Sariva,Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira.	PSY-ADT	MK	SH	PRA	P-EXAM,P-PRF	F&S	I	

CO1,CO6	Perform the objective parametric measures to understand the relation between Jaliyatwa Specific gravity (Liquid) of Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga.	PSY-ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
CO1,CO6	Perform the objective parametric measures to understand the relation between Aagneyatwa by pH of Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokshura, Hingu & Chandana.	PSY-ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
CO1,CO6	Perform the objective parametric measures to understand the relation between Vayaviyatwa by Specific gravity (Liquid) of Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu.	PSY-ADT	MK	SH	PT	P-EXAM,P-PRF	F&S	I	
Topic 2 2. Assessment of objective parametric measures of Guna									
CO1,CO6	Observe the assessment of objective parametric measures of Shatavari and Bala for its guru guna by Density (bulk).	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Observe the Specific gravity (Liquid and solid) of Shatavari and Bala for its guru guna.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of Yava and Dhanyaka for its Laghu guna by Density (bulk)	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Demonstrate the Specific gravity (Liquid and solid) Yava and Dhanyaka for its Laghu guna.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of Snigdha guna drugs by total fat content, moisture content of Tila and Eranda	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO1,CO6	Demonstrate Swelling index of Snigdha guna drugs of Tila, and Eranda.	PSY-GUD	MK	KH	D_L,PRA	P-VIVA	F&S	I	
CO1,CO6	Observe the assessment of objective parametric measures of	PSY-	MK	KH	PT,D_	P-VIVA	F&S	I	

	Ruksha guna drugs by total fat content and moisture content of Kulattha & Vidanga	GUD			L				
CO1,CO6	Demonstrate Swelling index of Ruksha guna drugs of Kulattha & Vidanga	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
Topic 3 3. Assessment of Rasa									
CO2,CO6	Perform the assessment of Rasa based on classical symptoms for each rasa dravyas.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF,INT	F&S	I	
Topic 4 4.Comparative organoleptic and macroscopic examination									
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of root of Ashwagandha, Chitraka, Manjistha, Musta, Shatavari, Vatsanabha and Yashtimadhu.	PSY-ADT	MK	SH	L_VC,PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Rhizome/Stolon of Haridra, Katuki, Shunthi and Vacha.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Stem of Asthishrinkhala and Guduchi.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Bark of Arjuna, Ashoka, Kutaja, Nimba and Twak.	PSY-ADT	MK	SH	BS,PT,D_L	P-EXAM,P-PRF	F&S	I	

CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Heart wood of Beejaka, Chandana and Khadira	PSY-ADT	MK	SH	BS,PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Leaf of Kumari, Meshashringi and Vasa.	PSY-ADT	MK	SH	BS,PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Flower of Dhataki, Kunkum (kesara) and Lavanga.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Fruit of Amalaki, Aragavadha, Bhallataka, Bibhitaki, Gokshura, Haritaki, Madanphala, Maricha, Pippali and Vidanga.	PSY-ADT	MK	SH	D_L,PRA	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Phalaraja of Kampillaka.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Seed of Bakuchi,Ela, Eranda, Jyotishmati	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	

	and Kapikacchu.								
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Unorganized drugs of Guggulu, Hingu and Mocharasa.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Whole plant of Apamarga, Bhrungaraja, Bhumyamalaki, Brahmi, Kalmeghaand and Mandukaparni.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
CO6	Perform the comparative organoleptic characters (Taste, Colour, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks etc) of Galls of Karkatshrungi.	PSY-ADT	MK	SH	PT,D_L	P-EXAM,P-PRF	F&S	I	
Topic 5 5. Microscopic Identification of genuine and adulterated drug									
CO6	Perform the comparative microscopic examination of genuine and adulterated any two samples of Root / stem / leaf /bark / fruits (E.g. like Sariva / Manjishta / Vidanga / Maricha / Ashoka).	PSY-ADT	MK	SH	TUT,PT,D_L	P-EXAM,P-PRF	F&S	I	
Topic 6 6. Demonstration of skills to identify the medicinal plants in the college garden.									
CO8	Demonstrate identification features of college garden medicinal plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	PSY-GUD	MK	KH	L_VC,ML,SDL,DG,FV	P-VIVA,P-EXAM,P-ID	F&S	I	
CO8	Participate actively in Identification of Medicinal plants.	AFT-RES	MK	SH	DG	P-VIVA,P-EXAM	F&S	I	

Topic 7 7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat / forest plant.	PSY-GUD	MK	KH	ML,SDL,DG	P-VIVA,P-EXAM	F&S	I	
CO8	Visit to observe the Tissue culture techniques of medicinal plants in local / nearby Tissue culture lab.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	I	
CO8	Visit to observe the herbaria of medicinal plants in nearby institute.	PSY-GUD	MK	KH	PT,D	P-VIVA	F&S	I	
CO6	Visit to observe the nearby AYUSH approved Quality control lab for quality control techniques.	PSY-GUD	MK	KH	L_VC,PT,D_L	P-VIVA	F&S	I	
Topic 8 8. Dravya prayoga									
CO5	Observe the selection of Ekala Dravya (single drug) in various clinical conditions	PSY-GUD	MK	KH	DIS,CBL,SDL,TUT	P-VIVA,QZ	F&S	I	
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked case sheets.	PSY-ADT	MK	SH	CBL,ECE	P-VIVA,P-EXAM	F&S	I	H-RN
Topic 9 9. Physico-chemical study									
CO6	Perform the foreign matter study of minimum 2 useful parts of medicinal plants.	PSY-ADT	MK	SH	PT,D_L	P-VIVA	F&S	II	
CO6	Observe the Loss on drying (LoD) study of minimum 2 useful parts of medicinal plants.	PSY-GUD	MK	KH	TUT,PT,D_L	P-VIVA	F&S	II	

CO6	Observe the Ash value and Extractive value of minimum 2 useful parts of medicinal plants.	PSY-GUD	MK	KH	PT,D_L	P-VIVA	F&S	II	
Topic 10 10. Phytochemical									
CO6	Perform Preliminary phytochemical study of minimum 2 medicinal plant extracts.	PSY-ADT	MK	SH	PT,D_L	P-VIVA,P-EXAM,P-PRF	F&S	II	
Topic 11 11. Thin Layer Chromatography (TLC) technique									
CO6	Observe the TLC (Thin layer chromatography) technique of one medicinal plant extract.	PSY-GUD	MK	KH	TUT,PT,D_L	P-VIVA,INT	F&S	II	
Topic 12 12. Demonstration of skills to identify the medicinal plants in the college garden									
CO8	Demonstrate identification features of college garden medicinal plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	PSY-GUD	MK	KH	L_VC,DG	P-VIVA,P-EXAM,P-PRF	F&S	II	
CO8	Participate actively in Identification of Medicinal plants.	AFT-RES	MK	SH	DG	P-VIVA	F&S	II	
Topic 13 13. Out campus visit (cultivated gardens & In-situ plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat / forest plant.	PSY-GUD	MK	KH	DG	P-VIVA	F&S	II	
Topic 14 14. Ekala dravya prayoga									
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked case sheets.	PSY-ADT	MK	SH	DIS,CBL,ECE,D_BED	P-VIVA,P-EXAM	F&S	II	H-RN
CO5	Appraise the value of selection of Ekala Dravya Prayog in	AFT-	MK	SH	PBL,	P-VIVA,P-	F&S	II	H-RN

	various clinical conditions by providing masked case sheets.	VAL			CBL, CD	EXAM			
Topic 15 15. Different Cultivation technique including methods mentioned in Vrikshayurveda									
CO8	Demonstrate different cultivation technique of medicinal plants in garden.	PSY-GUD	MK	KH	L_VC ,DG	P-VIVA,INT	F&S	II	
CO8	Demonstrate different cultivation methods mentioned in Vrikshayurveda in garden.	PSY-GUD	MK	KH	DG	P-VIVA	F&S	II	
Topic 16 16. Exercise on Network pharmacology									
CO2	Conduct the Identification (Data mining) active constituents by Pubmed, IMPPATor PubChem in digital library.	PSY-SET	MK	KH	DIS,D	P-VIVA,PA	F&S	III	
CO2	Conduct Target identification by Binding DB.	PSY-SET	MK	KH	D	P-VIVA	F&S	III	
CO2	Conduct Identification of disease gene by DisGeNET.	PSY-SET	MK	KH	TUT, D	P-VIVA	F&S	III	
CO2	Conduct GO (Gene ontology) enhancement analysis by KEGG Pathway, R ratio.	PSY-SET	MK	KH	D	P-VIVA	F&S	III	
CO2	Conduct Network construction by STRING, PPI network, sytoscope.	PSY-SET	MK	KH	D	P-VIVA	F&S	III	
Topic 17 17. Preparations of digital herbarium									
CO8	Prepare digital herbarium of minimum 10 medicinal plants during field visit with all parts of the plant with geo-tag photos.	PSY-ADT	MK	SH	L_VC ,W,T UT,D	P-SUR,RK	F&S	III	
Topic 18 18. Demonstration of skills to identify the medicinal plants in the college garden									
CO8	Demonstrate identification features of college garden medicinal	PSY-	MK	KH	L_VC	P-VIVA,P-	F&S	III	

	plants for their morphology, taxonomical keys, regional flora with therapeutic uses.	GUD			,DG	EXAM			
CO8	Participate actively in Identification of Medicinal plants.	AFT-RES	MK	SH	DG	P-VIVA,P-EXAM	F&S	III	
Topic 19 19. Out campus visit (cultivated gardens & In-situ plant demonstration)									
CO8	Visit to observe the identification features of medicinal plants which are from cultivated or natural habitat / forest plant.	PSY-GUD	MK	KH	DG	P-VIVA	F&S	III	
Topic 20 20. Ekala dravya prayoga									
CO5	Perform the selection of Ekala dravya prayoga in various clinical conditions by masked case sheets.	PSY-ADT	MK	SH	CBL, ECE, D_BED,PRA	P-VIVA,P-EXAM,RK	F&S	III	H-RN
CO5	Appraise the value of selection of Ekala Dravya Prayoga in various clinical conditions by providing masked case sheets.	AFT-VAL	MK	SH	PBL, CBL, CD	P-VIVA,P-EXAM	F&S	III	H-RN

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	1. Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests	1	• **1.1 Assessment and Understanding the relation between Parthivatwa & subjective/ objective parametric tests** • Density (bulk) • Specific gravity (solid) • **Drugs to study** for e.g.- Asthishrnkhala, Sariva, Vidari, Maricha, Shatavari, Jambu, Godhuma & Ushira • **1.2 Assessment and Understanding the relation between Jaliyatwa & subjective/ objective parametric tests** • Viscosity • Specific gravity • Moisture content • **Drugs to study** for e.g.- Kumari, Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala & Apamarga • **1.3 Assessment and Understanding the relation between Aagneyatwa & subjective/ objective parametric tests** • pH • Moisture content • **Drugs to study** for e.g.: Shunthi, Shatavari, Maricha, Dhataki, Chitraka, Gokhura, Hingu & Chandana • **1.4 Assessment and Understanding the relation between Vayaviytwa & subjective/ objective parametric tests** • Fat content • Specific gravity • Density (bulk) • **Drugs to study** for e.g. : Usheera, Ashwagandha, Nimba, Vidari, Khadira, Tila, Jambu & Kapikacchu • **1.5 Assessment and**	10

			Understanding the relation between Aakashiyatwa & subjective/ objective parametric tests • Density (Bulk) • **Drugs to study** for e.g.: Usheera, Kumari, Apamarga, Jeeraka & Jatamansi	
2	2. Assessment of objective parametric measures of Guna	1	• **2.1 Assessment of objective parametric measures Guru & Laghu Guna** • Density (bulk) • Specific gravity (Liquid and solid) • Drugs to study for e.g. : **Guru:** Shatavari, Bala ; **Laghu:** Yava, Dhanyaka • **2.2 Assessment of objective parametric measures of Snigdha and Ruksha guna drugs** • Total fat content • Moisture content • Swelling index • **Drugs to study** for e.g. **:** **Snigdha:** Tila, Eranda ; **Ruksha:** Kullatha, Vidanga	12
3	3. Assessment of Rasa	1	**Assessment of Rasa based on classical symptoms for each rasa dravyas.** One Example For each rasa	6
4	4.Comparative organoleptic and macroscopic examination	1	• **Comparative organoleptic (Taste, Color, Smell, Sound, Touch) and macroscopic examination (Size, Shape, Fracture, External markings like lenticels, ridges, nodes, furrows, cracks, etc)of the following group of drugs.** • **a. Root:** Aswagandha, Chitraka,	23

			Manjistha, Musta, Shatavari, Vatsanabha, Yashtimadhu. • **b. Rhizome/Stolon:** Haridra, Katuki, Shunthi, Vacha. • **c. Stem:** Asthishrinkhala, Guduchi. • **d. Bark:** Arjuna, Ashoka, Kutaja, Nimba, Twak. • **e. Heart wood:** Beejaka, Chandana, Khadira. • **f. Leaf:** Kumari, Meshashringi, Vasa. • **g. Flower:** Dhataki, Kunkum (kesara), Lavanga. • **h. Fruit:** Amalaki, Aragavadha, Bhallataka, Bibhitaki, Gokshura, Haritaki, Madanphala, Maricha, Pippali, Vidanga. • **i. Phalaraja:** Kampillaka • **j. Seed:** Bakuchi, Ela, Eranda, Jyotishmati, Kapikacchu • **k. Unorganized drugs:** Guggulu, Hingu, Mocharasa • **l. Whole plant:** Apamarga, Bhrungaraja, Bhumyamalaki, Brahmi, Kalmegha, Mandukaparni. • **m. Galls:** Karkatshrungi	
5	5. Microscopic Identification of genuine and adulterated drug	1	• **Microscopic identification of genuine and adulterated drug, minimum 2 samples from Root/stem/leaf /bark/fruits.** • (E.g. Sariva/Manjishta/Vidanga/Maricha/Ashoka)	4
6	6. Demonstration of skills to identify the medicinal plants in the college garden.	1		10
7	7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy	1	• **General instructions regarding combined educational visit**	10

	lab, Quality control lab and Forest plant demonstration)		• Combined educational visit can be planned wherever feasible as, for **Dravyaguna**- Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Forest plant demonstration ; f**or Agadatantra**- forensic lab, snake park, pollution control board and snake venum unit; f**or Swasthvrutta** -Yoga and naturopathy center , Milk dairy plant, Water Purification plant, Sewage treatment plant, Leprosy rehabilitation Centre & f**or Rasashastra-** GMP certified Lab , Drug Analysis Lab • **SOP for Out campus Field Visits** • **Theme-Based Visits**: Plan visits based on specific educational themes (Deshemani Ganas, Family wise), selecting locations relevant to the theme and collaborating with local experts. • **Dress Code**: Participants must wear jean paints and T shirts, closed-toe shoes, a hat or cap for sun protection, and weather-appropriate gear such as jackets or raincoats. • **Essential Materials**: Each participant should carry a water bottle, a stick (optional), materials for sample storage (newspaper, blotting paper, secateurs, plastic bags), a cap, goggles, and a packed lunch or snacks in a suitable container. • **Safety Precautions:** Conduct a safety briefing before the visit, outlining emergency procedures, collecting medical information, and emphasizing expected behaviors' during the trip. • **Itinerary**: Develop a detailed itinerary with activities and a timeline, considering the chosen theme and objectives of the visit. • **Public Address System (PA System)**: If necessary, provide a portable PA system with a	

			microphone, amplifier, and power source for effective communication with larger groups. • **Test the PA System**: Prior to the visit, ensure the PA system is in working order and audible, conducting necessary tests to guarantee functionality. • **Responsible Usage**: Use the PA system judiciously, speaking clearly and at an appropriate volume, while encouraging participants to utilize the system for questions or clarifications. • **Follow-up Activities**: Organize post-visit discussions and assignments to reinforce learning, encourage knowledge sharing, and facilitate deeper exploration of the theme. • **Review and Revise**: Regularly update and adapt this SOP to comply with safety standards, educational objectives, and local regulations.	
8	8. Dravya prayoga	1	• **8.1 (Part I) Demonstration of selecting appropriate Ekala dravya as per clinical conditions.** • **8.2 (Part II) Selection of Ekala dravya prayoga in various clinical conditions by providing masked case sheets per srotasa** (5 cases in each term)	12
9	9. Physico-chemical study	2	• **Physicochemical study of medicinal plant. (minimum 2 drugs)** • **a.** Foreign matter • b. Loss on drying • c. Ash value • d. Extracts	8

			• **Note: The same plant should be used for all the tests**	
10	10. Phytochemical	2	• **Preliminary phytochemical study of medicinal plant. (minimum 2 drugs)**	4
11	11. Thin Layer Chromatography (TLC) technique	2	• **TLC technique of medicinal plant (any one)**	2
12	12. Demonstration of skills to identify the medicinal plants in the college garden	2		10
13	13. Out campus visit (cultivated gardens & In-situ plant demonstration)	2		10
14	14. Ekala dravya prayoga	2	• **Selection of Ekala dravya prayoga in various clinical conditions by providing masked case sheets.** (5 cases in each term)	10
15	15. Different Cultivation technique including methods mentioned in Vrikshayurveda	2		6
16	16. Exercise on Network pharmacology	3	• **Exercise on Network Pharmacology** • **1st activity:** Identification (Data mining) active constituents by Pubmed, IMPPATor PubChem. • **2nd activity:** Target identification by BindingDB.	6

			• **3rd activity:** Identification of disease gene by DisGeNET. • **4th activity:** GO enhancement analysis by KEGG Pathway, R ratio. • **5th step:** Network construction by STRING, PPI network, sytoscope.	
17	17. Preparations of digital herbarium	3	• **Preparations of digital herbarium of minimum 10 drugs with all parts of the plant (with geo-tag photos) by compulsory field visit**	2
18	18. Demonstration of skills to identify the medicinal plants in the college garden	3		10
19	19. Out campus visit (cultivated gardens & In-situ plant demonstration)	3		10
20	20. Ekala dravya prayoga	3	**Selection of Ekala dravya prayoga in various clinical conditions by providing masked case sheets.**(5 cases in each term)	10
			Total Hr	**175**

Activity

CO	Topic name	Activity Details	Hours#
CO1,CO3	Dravyaguna Vigyana.	• **Group activity** – Assignments are to be given to the students to prepare 2-3 flash cards on importance of Dravyaguna Vigyana in clinical practice.	1

CO1,CO5,CO8	Dravya	• **Segregation** of dry drugs based on Panchabhoutika characteristics. Various Dravyas are given to the students for segregation of dravyas according to Panchabhoutik constitution • **Classify** live plants based on Panchabhoutika characteristics in garden. (Details mentioned in Rasavaisheshik Sutra 2 chapter 101-111) • **Quiz –** based on classifications of dravyas • **Brain storming** - Activity should be assigned to the students to search in samhitas related to classification of dravyas as Prayogabheda, Doshaghnabheda and Karmbheda. Prepare the list of specific assigned classification for group of students.	4
CO1,CO2,CO3	Guna Panchabhoutikatva, characteristics and classification.	• **Matching** of Gurvadi guna with its karma • **Animated Power point** Presentation on Guna. • **Brain storming** - To search in Chikitsasthana of samhitas regarding clinical application of Gurvadi guna and Paradi guna	2
CO1,CO2,CO3	Rasa	• **Game based activity** by closing the eyes they should ask to identify the taste • **Activity based learning** enlisting the dravyas of specific taste • **Matching activity** -Matching of specific Rasas with their Guna & Karma • **Making of Flash cards-** Cards with information regarding different concepts of Rasas	4

CO1,CO2,CO3	Vipak	• **Flash cards -** Preparing flash cards containing pictures of dravya to identify dravya and its vipaka • **Preparing charts** of 20 dravyas with ayathartha vipaka and yatharth vipaka	1
CO1,CO2,CO3	Virya	• **Talk and chalk activity** by students on Dwividha virya and ashtavidha virya. • **Making charts** of dravyas from Bhavaprakash nighantu regarding Dwividha virya- 25 Sheeta Virya dravyas & 25 Ushna Virya Dravyas.	2
CO1,CO2,CO3	Prabhav	• **Puzzle** – Segregating the dravyas based on Samanpratyayarabdha, Vichtrapratyayarabdha and Prabhava.	1
CO1	Interrelation of Rasa-Gun a-Virya-Vipaka-Prabhava with respect to their strength - Pharmacodynamics	• **Making flow charts** regarding the rules explained in relation with concepts of dravyaguna • **Group Discussion** - Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength - Pharmacodynamics	2
CO1,CO2,CO3,CO4 ,CO5	karma	• **Case base learning**-Taking different clinical conditions & selecting appropriate karma • **Think, Pair and share based activity**- Sepecific problem has to be given,	5

		student should be allowed to think and discuss about appropriate karmas • **Gamification-**Pairing Karma with the drugs. • **Role play for identification of specific karma-** Asking one student to enact & others to find out Karma • **Presentation-** On concept of Karma, types of karma & Individual Karma. • **Enlisting specific karma-**In relation to dravyas from Bruhatrayee & Sharangdhara samhita	
CO1,CO8	Karmas of Dashemani	• **Cramming** –Memorizing the dravyas from specific ganas • **Fish bowl activity** written chits of drugs picked by students and should say the name of the Gana • **Shloka recitation-** Shlokas of Dashemani Gana (Ch. Su. 4) • **Symposia-** Short discussion on various clinical applications of Dashemani Gana	3
CO4,CO9	Principles of General Pharmacology	• **Video:** Showing relevant videos regarding principles of pharmacology and mode of action • **Mobile based learning –**Searching about pharmacology in enlisted websites	1
CO1,CO3	Mishrak Gana	• **GBL**-Identification of mishrak gana by using clues of utility of specific mishrak gana from samhita and chikitsa grantha • **Matching** of dravyas with specific mishraka Gana • **Role play** –enacting individual and combined actions of composition for e.g. Triphala - Individulaly they should enact	2

		as Haritaki, Bibhitaki and Aamalaki explaing their karmas, then they should come together depicting Triphala. • **Self-directed learning-** Mobile based learning on Mishraka Gana	
CO1	Nomenclature of dravya as per Nighantu, Vedic taxonomy and botany	• **Bulletin boards :** Highlighting significant points of nomenclature • **Demo in garden :** Demonstration of the dravyas on the basis of various criteria's of nomenclature • **Symposium** by making groups of specific criteria for nomenclature and asked to present synonyms based on that particular criteria allotted to the group e.g. Upama , Rudhi, Prabhav, Deshokti, Swabhavatha, Lanchana & Guna	2
CO1,CO5	Prashasta Bheshaja, BheshajaPariksha and drug evaluation method with correlation as per Pharmacognosy	• **Read aloud :**Student come on the Dias and read with loud voice • **Self -directed learning** - Charak Samhita Vimansthana Chapter 8	2
CO1,CO7	Abhavapratinidhidravya (substitutes)	• **Self-directed learning**: Self study on Abhavapratinidhidravya (substitutes) from Bhavaprakasha	1
CO2,CO6	Classifications and techniques of aqueous and alcoholic extracts	• **Demo in lab** • **Video**	2
CO2	Adverse drug reaction and Pharmacovigilance with recent updates	• **PBL**: Story telling about reported cases	2

		• **Survey :** visit to pharmacovigilance cell at institution • **Guest lecture :** Activities of pharmacovigilance cell	
CO8	Vrikshayurveda and ethnomedicine	• **Videos**- Showing videos on cultivation practices and Ethnomedicine	1
CO2	Network Pharmacology & Bioinformatics	• **Video** • **Presentation**	1
CO5	**Bheshajavacharaniya**	• **Making charts** on Various Rasa dravya indicated in specific vyadhis for eg. • **Tikta rasa** in Jvara & Kushtha, • **Katu rasa** in Amavata, • **Kashaya rasa** in Pakwatisara, and Raktastambhana, • **Madhur rasa** in Dhatu kshya janya vyadhi , • **Amla & Lavana rasa** in Udavarta, Udara, Gulma,also used as Agnideepana, Mudhavatanulomana, Pachana	6
CO2,CO3,CO4,CO5 ,CO7,CO8	**2.Dravya (Drug) Nama-Guna-Karma Jnana**	• **Game base activity-** Activity based learning as the chits are prepared of different karmas , those are circulated among the students, once the circulation stops then the student with the chit will be asked to read the karma mentioned in the chit and to explain with examples. • **CBL** (Case based learning) **and PBL** (Problem based learning) activities taken for understanding of Karma in specific clinical scenario	08

		• **Segregation of dravyas** mentioned in syllabus according to Dashemani Gana • **Searching of** Mishrak gana from samhita and chikitsa granths for its utility • **Collecting information** about Grahya and Agahya dravyas mentioned in the syllabus with their characterestics	
CO2,CO3,CO4,CO5 ,CO7,CO8	**3.Dravya (Drug) Nama-Guna-Karma Jnana**	• **Matching** Rasapanchak, Rogaghnata, Agryakarma of dravya • **Making of charts** regarding Aamayika Prayogas, Agrya Karma & Specific Kalpana • **Case based activity**- one particular disease & suitable plants in order • **Critical reading** with the help of different indexed research articles • **Quiz**	17
CO2,CO3,CO4,CO5 ,CO7,CO8	**3.Dravya (Drug) Nama-Guna-Karma Jnana**	• Moc practical - • 1) 15 dry & 15 wet **sample dravya spotting test** • **Test** should include at least one each from Leaf, Stem, Root, Rhizome,Gall, Flower, Fruit , Seed, Bark & Resin. • Each spot should be solved in 1 minute so 30 minutes activity should be conducted. • 2) **Skill based assessment -**There shall be three components in skill assessment • A. Identify and separate Grahya & Agrahya of given sample • B. Identifying and grouping of drugs of given Mishraka Gana • C. Understand the clinical scenario and identify five suitable single drug • **Instructions:** • Spotting stations are to be numbered as per the batch. Each spotting station contain: A. Mixture of Grahya & Agrahya B. Name of Misraka Gana and	05

		C. Clinical Scenario. Students are allotted with the spotting station by lottery method. • **Arrangement of Spotting Stations:** • A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya dravya to be provided. There shall be two empty bowels each one labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station. • B. Identifying and grouping of drugs of given Misraka Gana: Each station shall contain one label containing name of the Misraka Gana with question 'Recollect the drugs belonging to the given Misraka Gana, identify those drugs, collect and make a group. There shall be empty bowl of sufficient size as per the given Gana for collection of drugs. • C. Understand the clinical scenario and identify five suitable 5 single drugs: Provide the clinical scenario in not less than 100 words and not more than 200 words with or without investigation reports shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions , select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference base.	

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	13

2	Lecture with Power point presentation	100
3	Lecture & Group Discussion	35
4	Lecture with Video clips	19
5	Discussions	42
6	Brainstorming	7
7	PBL	14
8	CBL	7
9	Project-Based Learning	3
10	TBL	3
11	Team project work	5
12	Flipped classroom	22
13	Blended Learning	13
14	Edutainment	4
15	Mobile learning	7
16	Role plays	3
17	Self-directed learning	14
18	Game-Based Learning	6
19	Library Session	18
20	Peer learning	16
21	Recitation	1
22	Tutorial	2
23	Presentations	20
24	Demonstration	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
			Practical	Viva	Elective	IA	Sub Total	

AyUG-DG	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	**Second Term (7-12 Months)**	**Third Term (13-18 Months)**
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 1	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-DG
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II

6 F Distribution of theory examination

Paper 1 Fundamental Dravyaguna						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**1.Dravyaguna Vigyana**	1	1	Yes	No	No
2	**2.Dravya**	1	6	Yes	Yes	No
3	**3. Guna**	1	11	Yes	No	Yes
4	**4. Rasa**	1	11	Yes	No	Yes
5	**5. Vipaka**	1	6	Yes	Yes	No
6	**6. Virya**	1	6	Yes	Yes	No
7	**7. Prabhava**	1	5	No	Yes	No
8	**8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava**	1	1	Yes	No	No
9	**9. Karma**	1	11	Yes	No	Yes
10	**10. Karmas of Dashemani Gana**	1	5	No	Yes	No
11	**11. Principles of General Pharmacology**	3	20	Yes	Yes	Yes
12	**12. Mishraka Gana**	3	6	Yes	Yes	No
13	**13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany**	3	1	Yes	No	No
14	**14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy**	3	1	Yes	No	No
15	**15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection**	3	1	Yes	No	No

	practices)					
16	**16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants.**	3	1	Yes	No	No
17	**17. Abhava Pratinidhi Dravya (substitutes)**	3	1	Yes	No	No
18	**18. Classifications and techniques of aqueous and alcoholic extracts**	3	1	Yes	No	No
19	**19. Adverse drug reaction and Pharmacovigilance with recent updates**	3	1	Yes	No	No
20	**20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy)**	3	1	Yes	No	No
21	**21. Vrikshayurveda and Ethno-medicine**	3	1	Yes	No	No
22	**22. Network pharmacology and Bioinformatics**	3	2	Yes	No	No
Total Marks			**100**			

Paper 2 Applied Dravyaguna						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
23	**1. Bheshajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis)**	2	5	Yes	No	No
24	**2.1 Dravya (Drug) Nama-Guna-Karma Jnana**	2	55	Yes	Yes	Yes

25	**2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana**	3	40	Yes	Yes	Yes
Total Marks			**100**			

6 G Blue print of paper I & II

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 1.Dravyaguna Vigyana **2.** 2.Dravya **3.** 3. Guna **4.** 4. Rasa **5.** 5. Vipaka **6.** 6. Virya **7.** 8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava **8.** 12. Mishraka Gana / 9. Karma **9.** 11. Principles of General Pharmacology **10.** 12. Mishraka Gana **11.** 13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany **12.** 14. Prashasta Bheshaja, Bheshaja Pariksha and drug evaluation method with correlation as per Pharmacognosy **13.** 15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices) **14.** 16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants. **15.** 17. Abhava Pratinidhi Dravya (substitutes) **16.** 18. Classifications and techniques of aqueous and alcoholic extracts **17.** 19. Adverse drug reaction and Pharmacovigilance with recent updates **18.** 20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy) **19.** 21. Vrikshayurveda and Ethno-medicine **20.** 22. Network pharmacology and Bioinformatics
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each**	**1.** 2.Dravya **2.** 5. Vipaka **3.** 6. Virya **4.** 7. Prabhava **5.** 10. Karmas of Dashemani Gana

	All compulsory **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**6.** 11. Principles of General Pharmacology **7.** 11. Principles of General Pharmacology **8.** 12. Mishraka Gana
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 3. Guna **2.** 4. Rasa **3.** 9. Karma **4.** 9. Karma
Paper No:2		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **2.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **3.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **4.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **5.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **6.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **7.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **8.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **9.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **10.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **11.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **12.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **13.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana

		14. 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **15.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **16.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **17.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **18.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **19.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **20.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **2.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **3.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **4.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **5.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **6.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **7.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **8.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **2.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana **3.** 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana **4.** 2.1 Dravya (Drug) Nama-Guna-Karma Jnana

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	1) **15 dry & 15 wet sample dravya spotting test- 30 minutesTest** should include at least one each from Leaf, Stem, Root, Rhizome,Gall, Flower, Fruit , Seed, Bark & Resin.	30
2	2) **Skill based assessment -**There shall be three components in skill assessment A. Identify and separate Grahya & Agrahya of given sample- 10 minutes B. Identifying and grouping of drugs of given Mishraka Gana- 10 minutes C. Understand the clinical scenario and identify five suitable single drug- 10 minutes **Instructions:** • Spotting stations are to be numbered as per the batch. Each spotting station contain: A. Mixture of Grahya & Agrahya B. Name of Misraka Gana and C. Clinical Scenario. Students are allotted with the spotting station by lottery method. **Arrangement of Spotting Stations:** A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya dravya to be provided. There shall be two empty bowels each one labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station. B. Identifying and grouping of drugs of given Misraka Gana: Each station shall contain one label containing name of the Misraka Gana with question 'Recollect the drugs belonging to the given Misraka Gana, identify those drugs, collect and make a group. There shall be empty bowl of sufficient size as per the given Gana for collection of drugs. C. Understand the clinical scenario and identify five suitable 5 single drugs: Provide the clinical scenario in not less than 100 words and not more than 200 words with or without investigation reports shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions , select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference base.	30
3	3. QC practical (30 minutes)-Performance based components • 3.1. Comparison Macroscopic evaluation of one genuine and one	40

	adulterant sample -10 marks- 15 minutes • 3.2. Panchamahabhoutikatwa assessment by parametric measures by pH of a given sample phant/ Kwatha - (Concern drug Phant / Kwatha should be prepared by college for pH analysis)- 10 marks - 15 minutes • 3.3. Panchabhaoutikatwa assessment by parametric measures by Specific Gravity of a given sample Phat/ Kwatha (Concern drug Phant/ Kwatha should be prepared by college for Specific Gravity)- 20 marks- 30 minutes	
4	4. Viva voce (10 minutes per student)Questions should be asked on following topics - • 1. Fundamentals (Dravya, Guna, Rasa, Vipaka, • Veerya & Prabhav)- 3 questions- 15 marks • 2. Karmas, Dashemani, Mishrak Gana- 3 questions- 15 marks • 3. Pharmacology & Network pharmacology- 3 questions- 15 marks • 4. Clinical application of drugs- 3 questions - 15 marks • 5. Viva on practical records -06 marks • 6. Communication skill (4 marks)	70
5	5. Internal Assessment	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Resources
1	Dravya Guna Shastram	Vaidya G.A. Phadke, Pradnya Mudranalaya, Vaidya Vamanrao Deenanath Shuddhaaayurved Pathyakrama Samitee, Dadabhai Navroji Path, Mumbai
2	Bhavaprakasha	Sri Brahmasankara Mishra and Sri Rupalalaji vaishya, Chaukhamba Sanskrit Series office, Varanasi,
3	Aushadhi Vigyna Shastra (Ayurvedic Pharmacology)	Sri. Vishvanatha Dwidevi ,Shri Baidyanath Ayurved Bhavan Pvt Ltd; Nagpur
4	Ayurvediya Aushadkarma Vigyana	Acharya V.J. Thakar, Gujurat Ayurveda University, Jamnagar
5	Bhava Prakash Nighantu	Vd. Krishna Chandra Chunekar Commentary, Chaukhambha Sanskrit Sansthan, Varanasi
6	Classical Uses of Medicinal Plants	Acharya Priyavrata Sharma ,Chaukhamba Visvabharati, Varanasi
7	Some Controversial Drugs in Indian Medicine	Dr. Bapalal, Vaidya,Chaukhambha Orientalia, Varanasi
8	Dravyaguna Kosha	Acharya Priyavrata Sharma, Chaukhambha Orientalia, Delhi
9	Dravyaguna Vigyana (Vol.1-3)	Dr. Gyanendra Pandey, Chaukhambha Krishnadas Academy, Varanasi
10	Dravyaguna Vigyana (Vol. 1-2)	Acharya Yadavji Tikramji,Baidyanath Ayurved Bhavan Ltd
11	Dravyaguna Vigyana (Vol. 1-5)	Acharya Priyavrata Sharma, Chaukhambha Bharti Academy, Varanasi
12	Nighantu Adarsh (Vol. 1-2)	Vd.G.Bapa Lal, Chaukhambha Bharti Academy, Varanasi
13	Ayurvedic Pharmacology & Therapeutic Uses of Medicinal Plants Dravyagunavignyan	Vaidya V M Gogte, Chaukhambha Publications, New Delhi
14	Dravyagunavijnana(Part I and II)	Prof.D.S.Lucas, Chaukhamba Visvabharati, Varanasi
15	Glossary of Vegetable Drugs in Brihattrayi	Thakur Balwant Singh & Vd. Krishna Chandra Chunekar,Chaukhamba Amarbharti Prakashakan, Varanasi
16	Introduction to Dravyaguna(English)	Acharya Priyavrata Sharma ,Chaukhambha Orientalia, Varanasi
17	A Text Book of Dravyaguna Vijnana (Vol 1,2 & 3)	Dr. Prakash L.Hegde and Dr. Harini A.,Chaukhambha Publications, New Delhi
18	Raspanchaka	Prof. Shiv Charan Dhyani,Chaukhambha Krishnadas Academy, Varanasi

19	Dravyaguna Siddhanta	Prof. Shiv Charan Dhyani,Chaukhambha Krishnadas Academy, Varanasi
20	The Ayurvedic Pharmacopoeia of India, Part I Vol. 1-VII	Ministry of AYUSH. India, New Delhi
21	Medicinal Plants used in Ayurveda (2nd Edition)	Rashtriya Ayurveda Vidyapeeth, New Delhi
22	Plants of Bhavaprakash (English)	Prof.K.C.Chunekar & Dr. N.P. Hota,Rashtriya Ayurveda Vidyapeeth, New Delhi.
23	Database of Medicinal Plants used in Ayurveda Vol. 1 to 8	CCRAS New Delhi
24	A Text Book of Dravyaguna Vijnana (Vol.1 to 2)	Dr. J. L. N Sastry and Dr. Tanuja M Nesari.
25	Dravyaguna Vigyana (Vol.1to 2)	Dr. Manasi Deshpande and Dr Arvind Deshpande, *Chaukhamba Sanskrit* Pratisthan. New Delhi
26	Essentials of Medical Pharmacology	K.D.Tripathi. **Jaypee Brothers Medical Publishers (P) Ltd**
27	Pharmacological basis of Medical Practice	Goodman & Gillman,McGraw-Hill Education
28	Pharmacology and Pharmacotherapeutics	Satoskar Bhandarkar & Ainapure,Popular Prakashan Mumbai
29	Textbook of Pharmacognosy	Trease & Evans, Elsevier publication
30	Textbook of Pharmacognosy	Tyler, Brady & Robber,Lea & Febiger, USA
31	Quality Control of Herbal Drugs: An Approach to Evaluation of Botanicals	Pulok K Mukharjee, Elsevier
32	Ausadhinamarupa vijnanam (Vol. 1 and 2)	Dr Sanjeev Kumar Lale.,Mr. Hemraj Lale, Indore
33	Practical Pharmacognosy	Dr. K. R.. Khandelwal and Dr. Vrunda Sethi , Nirali Prakashan Pune
34	Pharmacognosy	S.B. Gokhale, C.K. Kokate and A.P. Purohit
35	Botany of commonly used medicinal Plants with Diagnostic keys	Dr. Hema Sane and Dr. Yogini Kulkarni. Vision Publication Pune
36	Basic Bioinformatics	S Gladis Hepsyba Helen,MJP Publishers
37	Pharmacovigilance in Ayurveda	Manjunath Ajanal, B S Prasad, Shreddha U Nayak, Chaukhambha Prakashak, Varanasi
38	Cultivation Of Medicinal And Aromatic Crops	Azhar Ali Farooqi, B. S. Sreeramu, Universities Press (India) Pvt. Ltd. Hyderabad

39	WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants	World Health Organization,World Health Organization, Geneva
40	Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation	K. Thammasiri, Chunlin Long, Henrik Lutken, Shaik Mahammad Khasim,Springer Link
41	Network Pharmacology	Shao Li, Springer Link
42	Vrikshayurveda - Ancient Science of Plant Life and Plant Care	S. Rajasekharan, G.S. Unnikrishnan Nair, Kerala State Biodiversity Board, Kerala
43	Evidence-Based Validation of Herbal Medicine - Translational Research on Botanicals	Pulok K. Mukherjee,Elsevier Science
44	Research updates of Gurvadiguna	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Mishra S, Dwivedi RR, Ravishankar B. Conceptual and applied study of Snigdha and Ruksa Guna with special reference to Rasa-raktagata Sneha (hyperlipidemia). Ayu. 2011 Apr;32(2):200-6. • 4. Nair JU, Vyas HA, Nariya MB. An experimental study to evaluate *Gunasankarya* (combination of properties). Ayu. 2021 Oct-Dec;42(4):169-174. • 5. Gupta, Monika & Gudipudi, Sarvabhouma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.
45	Research updates of Paradiguna	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Gupta, Monika & Gudipudi, Sarvabhouma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.

46	Research updates of Shadrasa	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Standard Protocol for quality assessment of Raw medicinal plants materials on the basis of Rasa. • Ref: https://aiia.gov.in/wp-content/uploads/2021/12/RASA.pdf • 4. Rath SK, Panja AK, Nagar L, Shinde A. The scientific basis of rasa (taste) of a substance as a tool to explore its pharmacological behavior. Anc Sci Life. 2014 Apr-Jun;33(4):198-202. • 5. Gilca M, Dragos D. Extraoral Taste Receptor Discovery: New Light on Ayurvedic Pharmacology
47	Research updates of Vipaka	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi. • 3. Ranade AV, Shirolkar A, Pawar SD. Gut microbiota: One of the new frontiers for elucidating fundamentals of *Vipaka* in Ayurveda. Ayu. 2019 Apr-Jun;40(2):75-78.
48	Research updates of Virya	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.

49	Research updates of Prabhava	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
50	Research updates of Karma	• 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaiseshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala. • 2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

Course curriculum for Second Professional BAMS

(PRESCRIBED BY NCISM)



Agad Tantra evam Vidhi Vaidyaka

(SUBJECT CODE : AyUG-AT)

(Applicable from 2021-22 batch, from the academic year 2023-24 onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

।। आयुषे सर्वलोकानाम् ।।

SCAN ME

AT

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

NCISM

II Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-AT

Summary

Total number of Teaching hours: 300			
Lecture hours(LH)-Theory		100	100(LH)
Paper I	100		
Non Lecture hours(NLH)-Theory		200	200(NLH)
Paper I	60		
Non Lecture hours(NLH)-Practical			
Paper I	140		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	(Set SA) 10	30
Sub-Total	100	200			
Total marks	300				

Important Note:-The User Manual II BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual II before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic.
In case of difficulty and questions regarding curriculum write to cur.imp@ncismindia.org

PREFACE

Agada Tantra, is one of the eight clinical branches (Ashtanga) of Ayurveda. This branch of clinical toxicity was considered as the stalwart of Ayurveda which popularized this science across several civilizations around the world. Many great explorers glorified the snake bite management existed in India and this paved way for the popularization of Ayurveda in several countries with Ayurvedic scriptures being translated to several languages and many scholars came to India to study this science. The subject encompasses the detailed study for several toxicological conditions ranging from animate, inanimate and other disease entities with an inherent toxic pathology that enables to apply the principles of Agada Tantra in several diseases of contemporary significance.

Poisons disrupts the homeostasis created by the three doshas. Agada Tantra details measures to re-establish the proper functioning of the dosha, dhatu, mala, srotas and to reinstate the vital force (Oja). To attain this, a judicious use of Agada formulations is necessary coupled with specific treatment procedures enshrined in the 24-fold treatments (Chaturvimsati Upakrama). A proper assessment of the patient with respect to the level of spread of poison in the body ascertained through the concept of Vega is utmost important as far as any successful management of poisoning is concerned. A thorough knowledge of all these is essential to adopt treatment of any poison or to extend it to any contemporary toxicological conditions like contact dermatitis, food poisoning etc. Current curriculum has been designed to unearth the scope of this subject as a clinicl branch which aims at empowering an undergraduate student to understand the current clinical toxicological manifestations under the theoretical and practical/clinical framework of Agada Tantra.

The present curriculum of Agada Tantra equips an undergraduate student to grasp the clinical utility of these concepts through an effective teaching-learning process involving cognitive, psychomotor and affective domains. Students will be guided through effective teaching-learning methods to understand the concepts through state-of-the-art techniques like activity based learning, problem based learning and group activities. Effective evaluation techniques are also been incorporated to make the student community learn this subject in its entirity and utilizes the spectrum of its theoretical, practical and clinical aspects.

INDEX

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO 5
Table 2 : Contents of Course 6
Paper 1 6
Table 3: Learning objectives (Theory) of Course 12
Paper 1 12
List of Practicals 32
Table 4: Learning objectives (Practical) 33
Practical 1 33
Table 4a: List of Practical 40
Activity 42
Table 5- Teaching learning method 45
Table 6: Assessment Summary: Assessment is subdivided in A to H points 46
6 A-Number of Papers and Marks Distribution 46
6 B - Scheme of Assessment (formative and Summative) 46
6 C - Calculation Method for Internal assessment Marks 47
6 D - Evaluation Methods for Periodical Assessment 47
6 E Question Paper Pattern 48
6 F Distribution of theory examination 49
Paper 1 49
6 G Blue print of paper I 51
6 H Distribution of Practical Exam 53
References Books/ Resources 56
Abbreviations 57

Course Code and Name of Course

Course code	Name of Course
AyUG-AT	Agad Tantra evam Vidhi Vaidyaka

Table 1- Course learning outcomes and matched PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-AT At the end of the course AyUG-AT, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of fundamental concepts of Agada Tantra, Vyavahara Ayurveda and Vidhi vaidyaka in real life situations.	PO1,PO2
CO2	Diagnose and manage acute and chronic poisoning due to Sthavara, Jangama and Kritrima visha along with their contemporary relevance.	PO1,PO2,PO3,PO4, PO5
CO3	Demonstrate application of concepts of Dushivisha, Garavisha and Viruddha ahara in prevention, diagnosis and management of diseases.	PO1,PO2,PO3,PO4, PO5
CO4	Demonstrate application of principles of Agada Tantra and therapeutic administration of common Agada yoga and Visha dravya in Clinical practice.	PO2,PO3,PO4,PO5, PO9
CO5	Appreciate research updates in relevance to Agada Tantra and apply for healthcare promotion and social awareness.	PO6,PO7,PO8,PO9
CO6	Demonstrate application of professional skills of Forensic Medicine in handling medico legal issues.	PO2,PO3,PO6
CO7	Demonstrate professional and ethical behavior in discharging the medico-legal duties and responsibilities in abidance to the law.	PO5,PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1					
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	**Concepts of Agada Tantra (Clinical Toxicology)** 1.1 Agada Tantra and Clinical Toxicology. 1.2 Scope of Agada Tantra. 1.3 Definition of visha and poison, synonyms, visha guna, difference between visha, madya and oja guna, visha gati, classification of visha and poison, sthavara and jangama visha adhishtana. 1.4 Difference between poison, venom and toxin. 1.5 Routes of administration of poison. 1.6 Mode of action of visha (visha gunanusara karma) and poison (Introduction to toxicokinetics) 1.7 Factors modifying the action of poison. 1.8 Visha vardhaka bhava and visha sankata 1.9 Vishavega, vegantara and sthavara visha veganusara lakshana and chikitsa. 1.10 Visha peeta and vishamukta lakshana.	1	13	8	1
2	**Visha Chikitsa (Management of Poisoning)** 2.1. Diagnosis of poisoning in living & dead 2.2. Chaturvimshati upakrama. 2.3. General principles of management of poisoning. 2.4. Duties of medical officer in case of suspected poisoning.	1		5	4
3	**Vishakta aahara pariksha and Viruddha ahara** 3.1. Sources of exposure of visha with contemporary relevance. 3.2. Vishakta aahara pariksha. 3.3. Adulteration and tests for its detection. 3.4. Techniques used in the detection of poisons. 3.5. Viruddha-ahara with contemporary relevance. 3.6. Food poisoning and amavisha.	1		3	2
4	**Garavisha and Dooshivisha** 4.1. Garavisha 4.2. Dooshivisha 4.3. Contemporary aspects of garavisha and dooshivisha. 4.4. Role of garavisha and dooshivisha in the manifestation of diseases 4.5. Research updates in garavisha and dooshivisha	1	12	7	2
5	**Visha Upadrava and diseases caused due to exposure to Visha/poisons**	1		4	2

	• 5.1 Visha upadrava • 5.2 Drug-induced toxicity • 5.3 Occupational hazards. • 5.4 Allergic manifestations • 5.5 Endocrine disrupters				
6	**Environmental Toxicology** • 6.1 Vishakta vayu, jala and bhumi (air, water and land pollution) • 6.2 Effect of biological, chemical and nuclear warfare. • 6.3 Ecotoxicology & biomagnification. • 6.4 Toxicovigilance.	2	11	2	5
7	**Dermatological manifestations of visha/poisons.** 7.1. Contact dermatitis and its management. 7.2. Signs and symptoms and management of abhyanga visha, lepa visha, vastra visha, paduka visha, abharana visha etc. with contemporary relevance. 7.3. Signs and symptoms and management of dermatological manifestations due to cosmetics, chemicals, occupational and other allergens. 7.4. Dermatological manifestation due to dooshivisha and garavisha. 7.5. Dermatological manifestation due to bites and stings.	2		6	2
8	**Therapeutic utility of Agada yoga** • 8.1 Dooshivishari agada • 8.2 Bilwadi agada • 8.3 Dashanga agada • 8.4 Murvadi agada • 8.5 Panchashirisha agada • 8.6 Vishaghna mahakashaya (Charaka Samhita) • 8.7 Ekasara gana (Sushruta Samhita)	2		1	0
9	**Sthavara visha – Poisons of Plant origin** 9.1. Cardiac Poisons - Vatsanabha, Karaveera, Digitalis, Tobacco and Cerbera odollam.	2	17	4	2

	9.2. Neurotoxic Poisons- Kupeelu, Ahiphena, Dhattura, Bhanga. 9.3. Irritant Poisons - Jayapala, Gunja, Bhallataka, Arka, Snuhi, Langali.				
10	**Sthavara Visha – Poisons of Metallic origin** 10.1. Arsenic. 10.2. Mercury. 10.3. Lead. 10.4. Copper	2		4	2
11	**Jangama Visha** • 11.1. Sarpa visha 11.2. Loota visha 11.3. Vrischika visha 11.4. Mushika visha and its contemporary relevance. • 11.5. Alarka visha and its contemporary relevance. 11.6. Keeta visha 11.7. Vector borne diseases.	2		10	6
12	**Kritrima visha** • 12.1. Inorganic Acids – Sulphuric acid, Hydrochloric acid, Nitric acid. • 12.2. Organic Acids - Oxalic acid, Carbolic acid, Formic acid. 12.3. Alkalies - Potassium hydroxide and Sodium hydroxide. 12.4. Asphyxiants – Carbon monoxide, Carbon dioxide. 12.5. Non-metallic poisons – Phosphorous, cyanide 12.6. Hydrocarbons – Kerosene. 12.7. Agrochemical Poisoning – Organo-phosphorus compounds, Carbamates, Organo-chlorine compounds, Aluminium phosphide. 12.8. Household poisons.	3	12	2	0
13	**Substances of abuse** 13.1. Madya and madatyaya, Alcoholism. 13.2. Addiction - Alcohol, Bhang, Opioids, Tobacco and Digital addiction. 13.3. Drugs of abuse- Lysergic acid diethylamide (LSD) and 3,4-Methylenedioxy methamphetamine (MDMA).	3		4	3

	13.4. Narcotic Drugs and Psychotropic Substances (NDPS) Act.				
14	**Agada Tantra perspectives on cancer** 14.1. Toxic carcinogens. 14.2. Toxicities due to chemo and radiotherapy and its Ayurvedic approach. 14.3. Agada and visha dravya prayoga in the prevention and management of cancer along with its research updates.	3		2	4
15	**Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka):** • 15.1 Forensic Medicine and Medical Jurisprudence. 15.2 Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.	1	10	1	0
16	**Vaidya sadvritta : Duties and Responsibilities of medical practitioner** • 16.1 Vaidya sadvritta, medical ethics and code of conduct, Charaka oath and Hippocratic oath. • 16.2 NCISM - constitution, objectives and functions. • 16.3 Duties, rights and privileges of a registered medical practitioner. • 16.4 Consent, professional secrecy and privileged communication. • 16.5 Professional negligence, professional misconduct and unethical practices. • 16.6 Defenses in medical negligence suits. • 16.7 Medical records. • 16.8 Consumer Protection Act.	1		6	4
17	**Legal Procedures** 17.1. Courts and their powers 17.2. Inquest, evidence and witnesses 17.3. Court procedures: summons, oath, recording of evidence and conduct money. 17.4. Conduct of a medical professional in the court of law.	1		4	4
18	**Personal identity**	1		2	2

	18.1. Identification data 18.2. Age 18.3. Race, religion, sex. 18.4. Moles, tattoos, scars, occupational marks & hairs. 18.5. Hand writing, dactylography, DNA typing and superimposition				
19	**Thanatology** 19.1. Death 19.2. Signs of death. 19.3. Medicolegal autopsy and exhumation. 19.4. The Transplantation of Human Organs and Tissues Act (THOTA).	2	12	6	2
20	**Asphyxial deaths** 20.1. Hanging. 20.2. Strangulation and suffocation 20.3. Drowning.	2		4	2
21	**Injury** 21.1. Basics of injury 21.2. Mechanical injury 21.3. Firearm injury 21.4. Thermal injury 21.5. Dowry death	2		5	3
22	**Pregnancy, delivery and abortion** • 22.1 Medico-legal aspects of pregnancy, delivery, infanticide and battered baby syndrome. • 22.2 Abortion, Medical Termination of Pregnancy (MTP) Act and Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act. • 22.3 Medico-legal aspects of artificial insemination and surrogacy.	3	6	2	3
23	**Sexual offences** 23.1. Rape 23.2. Medico-legal aspects of sexual offences 23.3. Protection of Children from Sexual Offences (POCSO) Act	3		2	1
24	**Forensic psychiatry.** 24.1. Common symptoms associated with psychiatric disorders 24.2. Lucid interval	3	7	2	2

	24.3. Civil and criminal responsibilities of a mentally ill person 24.4. Mental Health Act (MHA)				
25	**Forensic science laboratory** 25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy, narcoanalysis, DNA profiling.	3		1	0
26	**Laws, Acts, Rules and Regulations** 26.1 Clinical Establishments Act 26.2 State AYUSH registration board rules and regulations. 26.3 Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008. 26.4 Drugs and Cosmetics Act and Rules – Schedules related to poison. 26.5 The Occupational Safety, Health and Working Conditions Code, 2020 26.6 Employees State Insurance Act, 1948. 26.7 Rights of Person with Disability Act, 2016.	3		3	2
Total Marks			**100**	**100 hr**	**60 hr**

Table 3: Learning objectives (Theory) of Course

Paper 1									
A3 Course outcome	**B3** Learning Objective (At the end of the session, the students should be able to)	**C3** Domain/sub	**D3** Must to know / desirable to know / Nice to know	**E3** Level Does/ Shows how/ Knows how/ Know	**F3** T-L method	**G3** Assessment (Refer abbreviations)	**H3** Formative/ summative	**I3** Term	**J3** Integration
Topic 1 Concepts of Agada Tantra (Clinical Toxicology) (Lecture :8 hours, Non lecture: 1 hours)									
CO1	Define Agada Tantra and Toxicology. Describe the scope of Agada Tantra in the present era.	CK	MK	K	L&PPT	T-EMI,T- EW	F&S	I	
CO1	Define visha and poison. Enlist its synonyms.	CK	MK	K	L&PPT	T-EMI	F&S	I	
CO1	Differentiate between poison,venom and toxin.	CK	MK	K	L,L&PPT	P-VIVA	F&S	I	
CO1	Describe classification of visha & poison	CK	MK	K	L&PPT	T-EMI,P-VIVA	F&S	I	
CO1	Describe sthavara and jangama visha adhisthana.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1	Describe the routes of administration of poison.	CC	MK	K	L&PPT	T- EW,P-VIVA	F&S	I	
CO1	Enlist visha guna and differentiate between visha, madya and oja	CK	MK	K	L&PP	T-EMI	F&S	I	

	guna.				T				
CO1	Describe the mode of action of visha (visha gunanusar karma) & poison (Introduction to toxicokinetics).	CC	MK	KH	L,L&PPT,L&GD	T-EMI,T- EW	F&S	I	
CO1	Describe the factors modifying the action of poison.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1	Describe vishavardhaka bhava and visha sankata.	CC	MK	KH	L&PPT	T-EMI,T-EW,P-VIVA	F&S	I	
CO1	Describe visha vega & vegantara	CK	DK	K	L&PPT	T-EMI,P-VIVA	F&S	I	
CO1	Describe sthavara visha veganusara lakshana and chikitsa	CK	MK	K	L,L&PPT	T-EMI	F&S	I	
CO1	Describe vishapeeta and vishamukta lakshana.	CK	MK	K	L&GD	T-EMI,P-VIVA	F&S	I	
Topic 2 Visha Chikitsa (Management of Poisoning) (Lecture :5 hours, Non lecture: 4 hours)									
CO2	Describe the diagnosis of poisoning in living and dead.	CAP	MK	KH	L&PPT	T-EMI,T-EW,P-VIVA	F&S	I	
CO2	Enumerate and discuss chaturvimshati upakrama	CC	MK	KH	L&PPT	T- EW,P-VIVA	F&S	I	
CO2	Describe the general principles of managment of poisoning.	CAP	MK	KH	L&PPT	T-EMI,P-VIVA	F&S	I	V-KC
CO2	Describe the duties of medical officer in case of suspected poisoning.	CK	MK	K	L&PPT	T-EMI,P-VIVA	F&S	I	
Topic 3 Vishakta aahara pariksha and Viruddha ahara (Lecture :3 hours, Non lecture: 2 hours)									

CO1,CO2,CO3	Explain the various sources of exposure of visha like anna, paana, vastra, abhyanga, lepa, paduka, abharana, etc.	CK	DK	K	L&PPT,L&GD	T- EW,CL-PR,M-CHT	F&S	I	
CO1,CO2,CO3	Describe the Ayurvedic methods of detection of food and beverages contaminated with visha.	CC	MK	KH	L&PPT,L_VC,SDL,D	T- EW,P-VIVA,P-EXAM	F&S	I	
CO1,CO2,CO3	Define adulteration, describe the methods of detection of adulterants and its relevance in Agada Tantra.	CAP	DK	KH	L_VC,SDL,PT	T- EW,P-VIVA,P-EXAM,OSPE,RK	F&S	I	
CO1,CO2,CO3	Describe the modern analytical techniques for the detection of poison (in contaminated articles) like chromatography, spectroscopy, etc.	CC	NK	KH	L&PPT,L&GD,L_VC	T- EW,P-VIVA,CL-PR	F&S	I	
CO1,CO2,CO3	Define viruddha ahara and explain its types.	CC	MK	KH	L&PPT,L&GD,BS	T- EW,P-VIVA,INT	F&S	I	
CO1,CO2,CO3	Discuss and illustrate the contemporary importance of viruddha ahara with examples	CAN	MK	KH	L&GD,BS,SDL	T- EW,QZ,CL-PR	F&S	I	
CO1,CO2,CO3	Discuss the application of concepts of viruddha ahara in the prevention and management of diseases.	CAP	MK	KH	L&GD,BS,SDL	T- EW,P-VIVA,CR-RED	F&S	I	
CO1,CO2,CO3	Describe food poisoning, its types and management.	CC	MK	KH	L&PPT,L&	T- EW,P-VIVA,CR-RED	F&S	I	

					GD,L_VC, CD				
CO1,CO2,CO3	Discuss the clinical application of principles of Agada Tantra in the management of food poisoning.	CAP	MK	KH	L&GD,BS, CBL, SDL	T- EW,P-VIVA,CL-PR	F&S	I	
CO1,CO2,CO3	Describe the concept of amavisha.	CC	MK	KH	L&PPT,L&GD,L_VC	T- EW,P-VIVA	F&S	I	
Topic 4 Garavisha and Dooshivisha (Lecture :7 hours, Non lecture: 2 hours)									
CO1,CO3	Describe the various definitions of garavisha.	CK	MK	K	L&PPT	T- EW	F&S	I	
CO1,CO3	Describe the clinical presentations of garavisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO3	Understand and explain the management principles of garavisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO1,CO3	Describe the various definitions of dooshivisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO3	Describe the clinical presentations of dooshivisha.	CC	MK	KH	L&PPT	T- EW	F&S	I	
CO3,CO4	Describe the principles of management of dooshivisha.	CC	MK	KH	L&PPT,DIS	T- EW,P-REC	F&S	I	
CO3,CO4	Discuss the application of the concept of dooshivisha and	CAP	MK	KH	L&G	P-VIVA	F&S	I	

	garavisha and its management in day to day clinical practice.				D				
CO3,CO5	Discuss the recent research updates in the concept of garavisha and dooshivisha.	CAN	MK	KH	L&GD,PER	P-VIVA,CL-PR	F&S	I	
CO1,CO3,CO4	Describe garavisha and dooshivisha as an etiology for the diseases of present era.	CAP	MK	KH	DIS,BS,FC	P-VIVA,CL-PR	F&S	I	
Topic 5 Visha Upadrava and diseases caused due to exposure to Visha/poisons (Lecture :4 hours, Non lecture: 2 hours)									
CO1,CO3	Describe visha upadrava.	CK	MK	K	L&PPT	T- EW,P-VIVA	F&S	I	
CO2,CO3,CO4	Define drug induced toxicity and discuss its Agada Tantra perspective.	CC	MK	KH	L&GD,L_VC,BS	T- EW,T-OBT,P-VIVA	F&S	I	
CO2,CO3,CO4	Discuss the application of principles of Agada Tantra in drug induced hepatotoxicity, nephrotoxicity and neurotoxicity.	CAP	MK	KH	L&PPT,CBL	T- EW,P-VIVA,CL-PR	F&S	I	
CO2,CO3,CO4	Discuss various occupational poisons and their health hazards.	CC	MK	KH	L&PPT,PBL,SDL	T-OBT,P-VIVA,M-CHT,M-POS	F&S	I	H-SW
CO2,CO3,CO4	Discuss the application of principles of Agada Tantra in occupational diseases caused due to pollution, paints, pesticides, fertilizer and other chemicals.	CC	DK	KH	L&PPT,ML	QZ ,CL-PR,M-CHT,M-POS	F&S	I	
CO2,CO3,CO4	Define and discuss allergy, types of allergens and its understanding as per Ayurveda.	CC	MK	KH	L&PPT,DIS,BS,C	INT,CR-RED	F&S	I	

					BL				
CO2,CO3,CO4	Discuss the application of the treatment principles of Agada Tantra in various allergic manifestations.	CAP	MK	KH	L&GD,BS,CBL	T-EMI,P-VIVA,PRN,CL-PR	F&S	I	
CO2,CO3,CO4	Define and enlist endocrine disruptors and discuss its Agada Tantra perspectives.	CAP	DK	KH	L&PPT,DIS,BS,CBL	CL-PR,M-CHT,COM	F&S	I	
Topic 6 Environmental Toxicology (Lecture :2 hours, Non lecture: 5 hours)									
CO4,CO5	Define environmental toxicology.	CK	DK	K	L&PPT,DIS	PRN,M-POS	F&S	II	
CO3,CO4,CO5	Describe the lakshanas and chikitsa of vishakta bhoomi, vishakta jala, and vishakta vayu.	CK	DK	K	L&PPT	P-VIVA,P-MOD	F&S	II	
CO4,CO5	Define pollution. Describe various pollutants and explain water pollution, soil pollution, air pollution,along with their health hazards.	CK	DK	KH	L&PPT,BS	T- EW,T-CS,PRN,P-MOD	F&S	II	
CO4,CO5	Describe the health effects of biological, chemical and nuclear warfare.	CK	NK	K	L&GD,SDL	PRN,QZ	F&S	II	
CO4,CO5	Define ecotoxicology & biomagnification.	CK	NK	KH	L&GD,SDL	PRN,CL-PR	F&S	II	
CO4,CO5	Explain the concept of toxicovigilance	CC	DK	K	FC,SDL	P-POS,CL-PR,CR-RED	F	II	
Topic 7 Dermatological manifestations of visha/poisons. (Lecture :6 hours, Non lecture: 2 hours)									

CO3,CO4	Describe the clinical presentations and diagnosis of paduka visha, abharana visha, vastra visha, lepa visha, abhyanga visha, etc.	CAP	MK	KH	L&PPT,DIS,CBL,CD	T- EW,P-CASE,CL-PR	F&S	II	
CO3,CO4	Discuss the management of paduka visha, abharana visha, vastra visha, lepa visha, abhyanga visha, etc.	CAN	MK	KH	L&PPT,DIS,CBL,PER	T- EW,P-EXAM,P-CASE,CL-PR	F&S	II	
CO3,CO4	Describe contact dermatitis and its types.	CK	MK	K	L&PPT	T- EW,P-VIVA	F&S	II	
CO3,CO4	Discuss the application of treatment principles of Agada Tantra in the contact dermatitis.	CAP	MK	KH	L&PPT,CBL	P-VIVA,P-CASE,CL-PR	F&S	II	
CO3,CO4	Discuss the dermatological conditions caused due to garavisha and dooshivisha.	CAP	MK	KH	L&PPT,DIS,CBL,CD	T- EW,P-VIVA,P-CASE	F&S	II	
CO3,CO4	Discuss the application of principles of treatment of garavisha and dooshivisha in the management of dermatological manifestations.	CAP	MK	KH	L&PPT,DIS,CBL	P-VIVA,P-CASE,CL-PR	F&S	II	
CO3,CO4	Discuss the daignosis and application of the treatment principles of Keeta visha in dermatological manifestations due to bites & stings.	CAP	MK	KH	L&PPT,DIS,CBL,SDL	T- EW,P-VIVA,P-CASE,CL-PR	F&S	II	
Topic 8 Therapeutic utility of Agada yoga (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO2,CO	Enlist ingredients and discuss the therapeutic utility of	CAP	MK	KH	L&PP	T- EW,P-	F&S	II	

3,CO4	Doohivishari Agada, Bilwadi Agada, Dashanga Agada, Murvadi agada and Panchashririsha Agada.				T,DIS ,CBL	CASE			
CO1,CO2,CO 3,CO4	Enlist and discuss the ingredients of vishaghna mahakashaya (Charaka Samhita) and ekasara gana (Sushruta Samhita).	CAP	MK	KH	L&PP T,BS, CBL, FC	T- EW,P-VIVA	F&S	II	
Topic 9 Sthavara visha – Poisons of Plant origin (Lecture :4 hours, Non lecture: 2 hours)									
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of vatsanabha.	CAP	MK	KH	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO4	Mention therapeutic dose and enlist two important formulations of vatsanabha.	CK	NK	K	L	T-EMI,P-VIV A,P-EXAM	F&S	II	
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of karaveera.	CAP	MK	K	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO4	Mention therapeutic dose and enlist two important formulations of karaveera.	CK	NK	K	L	T- EW,T- ME Qs,P-VIVA,P-EXAM	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of digitalis.	CAP	NK	K	L&PP T	T- EW,P-VIVA	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of tobacco.	CK	MK	K	L&PP T	T- EW,P-ID	F&S	II	
CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and	CK	DK	K	L&PP T	T- EW	F&S	II	

	medicolegal aspects of Cerbera odollam.								
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of Kupeelu.	CK	MK	KH	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of kupeelu.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of ahiphena.	CK	MK	KH	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of ahiphena.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of dhatura.	CK	MK	KH	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of dhatura.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of Bhanga.	CK	MK	K	L&PPT	T- EW,P-VIVA,P-EXAM,P-ID	F&S	II	
CO2,CO6	Mention therapeutic dose and enlist two important formulations of bhanga.	CK	NK	K	L	T-EMI	F&S	II	
CO2,CO4,CO6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of jayapala.	CK	MK	K	L&PPT	T- EW,P-VIVA,P-ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations	CK	NK	K	L	T-EMI,P-	F&S	II	

	of jayapala.					EXAM			
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of gunja.	CAP	DK	KH	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations of gunja.	CK	NK	KH	L	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of bhallataka.	CAP	MK	KH	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
CO4	Mention therapeutic dose and enlist two important formulations of bhallataka.	CK	NK	K	L	T-EMI,P-VIVA,P-EXAM	F&S	II	
CO2	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of arka and snuhi.	CK	DK	K	L&PP T	T- EW,P-VIVA	F&S	II	
CO2,CO4,CO 6	Describe the active principles, mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance and medicolegal aspects of langali.	CK	NK	K	L&PP T	T- EW,P-VIVA,P-ID	F&S	II	
Topic 10 Sthavara Visha – Poisons of Metallic origin (Lecture :4 hours, Non lecture: 2 hours)									
CO2	Describe the mode of action, fatal dose, fatal period, signs and symptoms, management, post-mortem appearance, medicolegal aspects of acute poisoning of 1. Arsenic 2. Mercury 3. Lead 4. Copper	CK	MK	K	L&PP T,PBL	T-EMI,T-MEQs,P-VIVA	F&S	II	

	Write its therapeutic dose and enlist any four important formulations.								
CO1,CO2	Discuss the Ayurvedic concepts for the diagnosis and management of chronic heavy metal toxicity.	CC	DK	K	L&PPT,L&GD	T-EMI,T-MEQs,P-VIVA	F&S	II	
CO2,CO3,CO4	Discuss the toxicological implications of improperly prepared medicines with special reference to those containing metals, minerals and poisonous substances.	CAP	NK	KH	L&PPT,CBL,FC	P-VIVA	F&S	II	
Topic 11 Jangama Visha (Lecture :10 hours, Non lecture: 6 hours)									
CO2,CO5	Describe sarpa bheda and ennumerate the indentification features of darvikara, mandali and rajimantha sarpa.	CAP	MK	KH	L&PPT,BS,CBL	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO5	Classify snakes and describe the features of venomous and non venomous snakes and identify their bites.	CAN	MK	K	L&PPT	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO5	Describe the fatal dose, fatal period, signs and symptoms of common cobra, king cobra, russel's viper, saw scaled viper, pit vipers and common krait.	CAN	MK	KH	L&PPT,DIS,BS,CBL	T- EW,T-CS,P-VIVA,P-EXAM	F&S	II	
	Describe the samanya lakshana and samanya chikitsa of darvikara, mandali and rajimanth sarpa damsha.	CK	MK	K	L	T-EMI	F&S	II	
CO2,CO5	Describe the management of snake bites according to recent WHO snake bite management guidelines.	CAN	MK	KH	L&PPT,CBL,PER,CD	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO5	Describe the classification, diagnosis, samanya lakshana and chikitsa of lootavisha with its contemporary aspects.	CAN	MK	KH	L&PPT,CB	T- EW,P-VIVA	F&S	II	

					L				
CO2,CO5	Describe the classification, diagnosis, samanya lakshana and chikitsa of vrischika damsha (Scorpion Sting) along with its contemporary aspects.	CK	MK	K	L&PPT,CBL,CD	T- EW,P-VIVA,P-EXAM	F&S	II	
CO2,CO4	Describe leptospirosis and rat bite fever with special reference to mushika visha.	CK	NK	K	L,CBL	T- EW	F&S	II	
CO2,CO5	Describe rabies and its management with special reference to alarka visha.	CK	DK	KH	L&GD,CBL	T- EW,P-VIVA	F&S	II	
CO2,CO5	Describe the classification of keeta, samanya sakshana and chikitsa of keeta damsha with special importance to regional prevalence.	CAN	DK	KH	L&PPT,CBL	T- EW	F&S	II	
CO2,CO5	Discuss the application of visha chikitsa in vector borne diseases like chikungunya, dengue and malaria.	CAP	DK	KH	L&PPT,DIS	P-VIVA	F&S	II	
Topic 12 Kritrima visha (Lecture :2 hours, Non lecture: 0 hours)									
CO2	Describe the action of poison, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medico legal aspects of Inorganic acids - Sulphuric acid, Hydrochloric acid and Nitric Acid Organic acids - Oxalic acids, Carbolic acids and Formic acid Alkalies	CK	MK	KH	L&PPT,PER	T- EW,P-VIVA,P-EXAM	F&S	III	
CO2	Describe the action of poison, fatal dose, fatal period, signs and	CK	DK	KH	L&PPT,PE	T- EW,P-VIVA	F&S	III	

	symptoms, management, post mortem appearance and medico legal aspects of Asphyxiants - CO and CO2 Non Metal - Phosphorous Hydrocarbon - Kerosene				R				
CO2	Describe the action of poison, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medico legal aspects of agrochemical poisons- organophosphorous compounds, carbamates, organochlorine compounds and aluminium phosphide and enlist the household poisons.	CAP	MK	SH	L&PPT,PBL	T- EW,P-VIVA,P-EXAM	F&S	III	
Topic 13 Substances of abuse (Lecture :4 hours, Non lecture: 3 hours)									
CO1,CO2	Define Mada and describe its stages.	CK	MK	K	L&PPT	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO1,CO2	Describe the types of madatyaya along with its management.	CK	MK	K	L&PPT	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO1,CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medicolegal importance of acute ethanol poisoning.	CC	MK	KH	L&PPT	T-EMI,T-CS,T-OBT,P-VIVA	F&S	III	
CO1,CO2,CO6	Describe mode of action, fatal dose, fatal period, signs and symptoms, management, post mortem appearance and medicolegal importance of acute methanol poisoning.	CC	MK	K	L&PPT	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO2,CO4	Discuss the application of principles of Ayurveda in the	CC	MK	KH	L&G	T- EW,P-	F&S	III	

	management of chronic alcoholism.				D,BS	VIVA			
CO2,CO4	Discuss the signs & symptoms of alcohol withdrawal with its Ayurvedic approach.	CC	MK	KH	L&G D,BS, IBL	T- EW,P-VIVA	F&S	III	
CO2,CO4	Discuss the signs & symptoms of withdrawal of bhang (cannabis), ahiphena/opium and its derivatives, tobacco, LSD and MDMA with its Ayurvedic approach.	CC	MK	KH	L&G D,BS, TUT	T- EW,P-VIVA	F&S	III	
CO2,CO4	Discuss the reseach updates in Ayurveda in the management of conditions due to substances of abuse.	CC	MK	KH	L&G D	T-EMI,T- MEQs,T-CRQs,P-VIVA	F&S	III	
CO7	Describe the NDPS Act.	CK	DK	K	L&PPT	T- EW	F&S	III	
Topic 14 Agada Tantra perspectives on cancer (Lecture :2 hours, Non lecture: 4 hours)									
CO2,CO4	Discuss the concepts of Agada Tantra in oncology.	CC	MK	KH	L&G D,BS, PBL	T-EMI,T-MEQs,P-VIVA	F&S	III	
CO1,CO2	Enlist the cancer causing toxic chemicals / substances (toxic carcinogens) and describe the process of mutation in genes and carcinogenesis.	CC	MK	K	L&G D	T-EMI,T- MEQs,T-CRQs,P-VIVA,SA	F&S	III	
CO2,CO4	Describe the chemotherapy induced common toxicities and Ayurvedic approach for its management.	CC	MK	KH	L&PPT,PBL	T-EMI,T- MEQs,T-CRQs,P-VIVA,SA	F&S	III	
CO2,CO4	Describe the radiotherapy induced common toxicity and Ayurvedic approach for its management.	CC	MK	KH	L&G D,PBL,SDL	T-EMI,T- MEQs,T-CRQs,P-VIVA	F&S	III	

CO2,CO4	Discuss the role of visha and vishaghna dravya in the management of cancer along with its research updates.	CC	DK	KH	L&GD,BS	T-EMI,T- MEQs,T-CRQs,P-VIVA	F&S	III	
Topic 15 Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka): (Lecture :1 hours, Non lecture: 0 hours)									
CO1,CO6,CO7	Define Forensic Medicine & Medical Jurisprudence. Give an introduction to Indian Penal Code (IPC), Criminal Procedure Code (CrPC) and Indian Evidence Act (IEA).	CC	MK	KH	L&GD	T- EW,P-VIVA,QZ	F&S	I	
Topic 16 Vaidya sadvritta : Duties and Responsibilities of medical practitioner (Lecture :6 hours, Non lecture: 4 hours)									
CO1,CO6,CO7	Describe vaidya sadvritta, medical ethics, code of conduct, Charaka oath and Hippocratic oath.	CK	MK	K	L&PPT,L&GD,BS,PER	T- EW,P-VIVA	F&S	I	
CO1,CO6,CO7	Desribe the constitution, objectives and functions of NCISM.	CK	MK	K	L&PPT,DIS	T- EW,P-VIVA	F&S	I	
CO6,CO7	Describe the duties and rights and privileges of a registered medical practitioner.	CK	MK	K	L&PPT,DIS	T- EW,P-VIVA	F&S	I	
CO1,CO6,CO7	Describe consent, professional secrecy and privileged communication.	CC	MK	K	L&PPT,BS	T- EW	F&S	I	
CO1,CO6,CO7	Describe professional negligence, professional misconduct and unethical practices.	CC	MK	K	L&GD,CBL,PER	T- EW,P-VIVA	F&S	I	
CO6,CO7	Explain the defenses in medical negligence suits with appropriate case laws.	CAP	MK	K	L&PPT,L&GD,B	T- EW,P-VIVA	F&S	I	

					S,CBL				
CO6,CO7	Describe the maintainance of medical records and explain its significance.	CC	MK	K	L,FV	T- EW,P-VIVA	F&S	I	
CO7	Describe the Consumer Protection Act.	CK	MK	K	L&PPT	T- EW,P-VIVA	F&S	I	
Topic 17 Legal Procedures (Lecture :4 hours, Non lecture: 4 hours)									
CO1,CO6,CO7	Describe the types of courts along with their powers. Describe - Inquest, Evidence, Witness, Summons, Conduct money and procedure of recording of evidence in a court of law. Describe the conduct of a medical professional in the court of law.	CC	MK	KH	L&PPT,DIS,SDL	T- EW,P-VIVA,CL-PR	F&S	I	
Topic 18 Personal identity (Lecture :2 hours, Non lecture: 2 hours)									
CO1,CO6	Define identification and enlist the identification data. Describe the method of estimation of age based on Teeth, ossification of bones, secondary sexual characteristics and general development.	CC	DK	KH	L&PPT,L_VC,DIS	T- EW,P-VIVA	F&S	I	
CO1,CO6	Describe the medico-legal importance of age, tattoo marks and occupational marks.	CK	DK	K	L&PPT	T- EW	F&S	I	
CO1,CO6	Describe the medico-legal importance of race, religion, sex, moles and hair.	CC	DK	KH	L_VC,DIS,EDU	P-VIVA	F	I	
CO1,CO6	Describe the medico-legal importance of handwriting, dactylography, DNA typing and superimposition as an identification data.	CK	NK	K	L,EDU	T- EW	F	I	
Topic 19 Thanatology (Lecture :6 hours, Non lecture: 2 hours)									

CO6	Define death and describe the stages and modes of death. Explain the immediate changes following death.	CC	MK	KH	L&PPT,L&GD,L_VC	T- EW,P-VIVA	F&S	II	
CO6	Enlist and explain the early changes following death. Describe Algor mortis, rigor mortis and livor mortis with regards to their definition, mechanism, modifying factors and medico legal importance.	CC	MK	KH	L&PPT,L_VC,DIS,SIM	T- EW,P-VIVA	F&S	II	
CO6	Enlist the late changes following death and describe the definition, modifying factors and medico legal importance of putrefaction, mummification and adipocere formation.	CC	MK	KH	L&PPT,L_VC,DIS	T- EW,P-VIVA	F&S	II	
CO6	Define Autopsy and describe its types, its objectives, rules and procedure along with exhumation.	CC	MK	KH	L&PPT,L_VC	T- EW,P-VIVA	F&S	II	
CO6	Describe the Transplantation of Human Organs and Tissues Act.	CC	NK	KH	BS,SDL,PER	T- EW,P-VIVA	F	II	
Topic 20 Asphyxial deaths (Lecture :4 hours, Non lecture: 2 hours)									
CO6	Define hanging. Describe its classification, causes of death, post-mortem appearances and medico-legal aspects.	CK	MK	KH	L&PPT,DIS	T- EW,T- MEQs,T-CS,P-	F&S	II	

						VIVA,P-MOD			
CO6	Define strangulation and suffocation. Enlist their classification, post-mortem appearances and medico-legal aspects.	CK	MK	K	L&PPT,D-M	T- EW,T- MEQs,PRN,M-MOD	F&S	II	
CO6	Define Drowning, explain its classification, post-mortem appearances and medico-legal aspects.	CK	MK	K	L&PPT,L_VC	T- EW,P-VIVA,PRN,P-CASE	F&S	II	
Topic 21 Injury (Lecture :5 hours, Non lecture: 3 hours)									
CO6	Define and classify Injuries. Describe the medico-legal aspects of injuries.	CK	MK	K	L&GD	T- EW	F&S	II	
CO6	Describe the characteristics, age and medico-legal aspects of mechanical injuries.	CK	MK	K	L&PPT	T- EW	F&S	II	
CO6	Describe firearm injuries, its characteristics and medico-legal aspects. Differentiate between entry and exit wound	CK	DK	K	L&PPT	T- EW	F&S	II	
CO6	Define and classify thermal injury. Describe charecterstics and degrees of burns, rule of nine, post-mortem appearances, and medico-legal aspects.	CK	DK	K	L&GD	T- EW	F&S	II	
CO6	Explain medico-legal aspects of dowry death.	CK	NK	K	L&GD	T- EW	F&S	II	
Topic 22 Pregnancy, delivery and abortion (Lecture :2 hours, Non lecture: 3 hours)									
CO6,CO7	Define pregnancy, delivery, infanticide and battered baby syndrome along with their medico legal aspects.	CK	MK	K	L,L&PPT,L&GD	T- EW,T-CS,P-VIVA,P-EXAM	F&S	III	
CO6,CO7	Define and classify abortion, MTP Act and PCPNDT Act.	CK	MK	K	L&PPT,D-	T- EW,T- MEQs,T-CS,P-	F&S	III	

					M,D	VIVA,PRN			
CO6,CO7	Describe Surrogacy (Regulation) Act 2021 and the Assisted Reproductive Technology (Regulation) Act 2021.	CK	NK	KH	L,L&PPT	P-VIVA,O-QZ	F&S	III	
Topic 23 Sexual offences (Lecture :2 hours, Non lecture: 1 hours)									
CO6	Describe classification of sexual offences.	CK	NK	KH	L&PPT	P-VIVA,PRN,QZ	F&S	III	
CO6	Define rape. Describe the examination of rape victim and accused and its medico legal aspects.	CK	MK	KH	L&PPT,CBL	T- EW,P-VIVA,P-EXAM,PRN	F&S	III	
CO6	Define the un-natural sexual offences and sexual perversion with their medico-legal aspects and give introduction to POCSO Act.	CK	NK	K	L&PPT,CBL	P-VIVA,QZ	F&S	III	
Topic 24 Forensic psychiatry. (Lecture :2 hours, Non lecture: 2 hours)									
CO6	Describe the symptoms commonly associated with psychiatric disorders & the significance of lucid interval.	CK	DK	K	L&PPT,TUT	T-EMI,T-EW,P-VIVA	F&S	III	
CO6,CO7	Describe the civil and criminal responsibilities of a mentally ill person.	CK	DK	K	L&PPT	T- EW,P-VIVA	F&S	III	
CO6	Describe Mental Health Act	CK	NK	K	SDL,PER	T- EW,P-VIVA	F&S	III	
Topic 25 Forensic science laboratory (Lecture :1 hours, Non lecture: 0 hours)									
CO6	25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy,	CK	DK	K	L&PPT,ML	T-OBT,P-VIVA	F&S	III	

	narcoanalysis, DNA profiling.								
Topic 26 Laws, Acts, Rules and Regulations (Lecture :3 hours, Non lecture: 2 hours)									
CO6,CO7	Describe the 1. NCISM Rules and Regulations in force. 2. Clinical Establishments Act. 3. Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008. 4. The Drug and Cosmetic Act - schedules related to poison. 5. Rules and Regulations related to AYUSH State Registration Boards of concern state.	CK	DK	K	L&PPT,DIS,SDL	T- EW,P-VIVA,CL-PR	F&S	III	

List of Practicals (Term and Hours)

PRACTICALS (Marks-100)			
S.No	**List of Topics**	**Term**	**Hours**
1	Visha Chikitsa	1	6
2	Vishakta Ahara Pariksha	1	6
3	Dooshivisha, Garavisha, Visha Upadrava	1	20
4	Dermatological manifestation of visha	2	20
5	Environmental toxicology	2	2
6	Jangama Visha	2	10
7	Sthavara visha	2	6
8	Substance abuse	3	8
9	Legal Procedures	1	2
10	Vaidya Sadvritta	1	2
11	Personal Identity	1	4
12	Thanatology	2	6
13	Injury	2	6
14	Sexual offences	3	2
15	Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)	2	30
16	Topics related to regional preference	3	10

Table 4: Learning objectives (Practical)

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know / desirable to know / Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment (Refer abbreviations)	H4 Formative/ summative	I4 Term	K4 Integration
Topic 1 Visha Chikitsa									
CO2	Demonstrate the procedure of gastric lavage on mannequin.	CAP	MK	SH	D-M,D	P-EXAM,P-PRF,OSPE	F&S	I	
CO2	Demonstrate the procedure of CPR on mannequin.	PSY-MEC	MK	D	D-M,D	P-EXAM,P-PRF,OSPE	F&S	I	
CO2	Observe the differrent procedures for removal of absorbed poison.	CC	MK	KH	L_VC,D	P-VIVA	F&S	I	
Topic 2 Vishakta Ahara Pariksha									
CO2	Demonstrate adulteration detection test for urea in milk, boric acid in milk, artificial colour in turmeric, pulses and vegetables as per recent Food Safety and Standards Authority of India (FSSAI) guidelines.	PSY-SET	MK	D	D_L	P-PRF,RK	F&S	I	
CO2	Demonstrate adulteration detection test for argemone oil in mustard oil and adulterants in Honey as per recent FSSAI guidelines.	PSY-SET	MK	D	D_L	P-PRF,RK	F&S	I	
Topic 3 Dooshivisha, Garavisha, Visha Upadrava									

CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - drug induced toxicities.	CAP	MK	SH	L_VC ,CBL, SIM, CD	SP,OSCE ,RK	F&S	I	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - occupational hazards.	CAP	MK	KH	L_VC ,PBL, CBL, SIM, CD	OSCE ,RK	F&S	II	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - allergic manifestations.	CAP	MK	KH	L_VC ,PBL, CBL, SIM, CD	OSCE ,RK	F&S	I	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - autoimmune diseases	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	I	
CO3,CO4	Diagnosis and management of diseases due to garavisha, dooshivisha and visha upadrava - endocrine disruptors induced diseases.	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	I	
Topic 4 Dermatological manifestation of visha									
CO3,CO4	Diagnosis and Management of Dermatological manifestations due to visha ex: contact poisoning (paduka visha, abharana visha etc.)	CAN	MK	SH	L_VC ,CBL, CD	OSCE ,RK	F&S	II	
CO3,CO4	Diagnosis and management of dermatological manifestations due to visha - bites and stings.	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	II	

CO3,CO4	Diagnosis and Management of contact dermatitis based on the principles of Agada Tantra.	CAP	MK	KH	L_VC ,CBL, CD	OSCE ,RK	F&S	II	
Topic 5 Environmental toxicology									
CO5	Social Awareness program related to environmental toxicology – Rally, street play, skit etc	AFT-VAL	DK	SH	RP	P-VIVA,M-CHT	F	II	
Topic 6 Jangama Visha									
CO2,CO4	Demonstrate identification of poisonous and non poisonous snakes.	CAN	MK	KH	L&G D,L_ VC,D-M,FV	P-VIVA,P-EXAM,OSCE	F&S	II	
CO2,CO4	Demonstration of the diagnosis of poisonous snake bite cases based on local and systemic clinical presentations.	CAP	MK	KH	L&G D,L_ VC,C BL,C D	P-VIVA,P-EXAM,RK	F&S	II	
CO2,CO4	Demonstration of identification of vrishchika, loota and keeta based on regional prevalence and their diagnosis based on clinical presentations.	CAP	MK	KH	L&G D,L_ VC,C BL,C D	P-VIVA,P-EXAM,RK	F&S	II	
Topic 7 Sthavara visha									
CO2	Demonstration of Identification of vatsanabha, karaveera and tobacco with their respective toxic parts.	CAN	MK	KH	D-M,D	P-VIVA,P-EXAM,OSPE ,RK	F&S	II	
CO2	Demonstration of Identification of kupeelu, dhattura and bhanga	CAN	MK	KH	D	P-VIVA,P-	F&S	II	

	and their respective toxic part.					EXAM,OSPE ,RK			
CO2	Demonstration of Identification of jayapala, gunja, bhallataka, langali with their respective toxic parts.	CAN	MK	KH	D	P-VIVA,P-EXAM,OSPE ,RK	F&S	II	
CO2	Demonstration of identification of arsenic, copper, mercury and lead.	CAN	MK	K	D-M	P-VIVA,P-EXAM	F&S	III	
CO2	Demonstration of Identification of non metal and mineral compounds, acids, alkalis, agrochemicals, hydrocarbons and household poisons.	CK	MK	K	D	P-VIVA,P-EXAM,RK	F&S	III	
Topic 8 Substance abuse									
CO2,CO4	Create public awareness on substance abuse and its ill effects.	AFT-VAL	MK	SH	RP,D	P-POS,QZ ,M-CHT	F	III	
Topic 9 Legal Procedures									
CO6,CO7	Demonstartion on issuing of fitness certificate, sickness certificate, birth and death certificate, and other relevant medical and medico legal certificates.	CAN	MK	D	PBL, W,PT	P-EXAM,OSPE ,RK	F&S	I	
CO6,CO7	Demonstartion of reporting of Leave against medical advice (LAMA), discharge against medical advice (DAMA) and doscharge on patient request (DOPR)	CAP	MK	D	SDL	P-VIVA,RK	F	I	
Topic 10 Vaidya Sadvritta									
CO6,CO7	Exposure to medical records department for understanding storage, maintanance and disposal of Medical records.	CK	DK	K	D,FV	P-VIVA	F&S	I	
Topic 11 Personal Identity									

CO6	Demonstrate the method of sex determination based on pelvis.	CAP	MK	SH	EDU, SIM, D	P-PRF,OSPE	F&S	I	
Topic 12 Thanatology									
CO6	Observe the procedure of medico-legal autopsy and preparation autopsy report.	CAP	MK	SH	L_VC ,D,FV	RK	S	II	
Topic 13 Injury									
CO6,CO7	Demonstrate the difference between homicidal, suicidal and accidental injuries.	CAP	MK	SH	L&PP T,L_ VC,SI M,D-M	P-VIVA,P-EXAM	F&S	II	
CO6,CO7	Demonstration of drafting of an injury report.	CAP	MK	D	D-M,D	P-EXAM,P-PRF	F&S	II	
Topic 14 Sexual offences									
CO5,CO6,CO7	Discuss the essentials of Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013.	AFT-VAL	DK	D	L&G D,BS, RP	C-INT,INT	F&S	III	
Topic 15 Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)									
CO6,CO7	(Visit to Forensic Science Laboratory) - (Mandatory) Appraise the functioning of a forensic science laboratory	CC	MK	KH	FV	P-VIVA,RK	F	III	
CO4,CO5	(Visit to Food testing laboratory) Observe the instrumentation and procedire of food testing	CC	DK	KH	FV	RK,COM	F	I	

CO4,CO5	(Visit to Pollution Control Board) - (Mandatory) Perceive the functioning of Pollution Control Board	CC	DK	KH	FV	P-VIVA,RK	F	II	
CO4,CO5	(Visit to De-addiction centre)Observe the management of de-addiction cases	PSY-GUD	DK	KH	FV	RK	F	III	
CO7	(Visit to the Court) - (Mandatory) Observe the procedure of court procedure and conduct of a medical practitioner as an expert witness	PSY-GUD	MK	KH	FV	RK	F	I	
CO6	(Visit to mortuary for observation of autopsy)Observe the procedure of medico-legal autopsy	PSY-GUD	MK	KH	FV	P-VIVA,RK	F	II	
CO2	(Visit to snake park) - (Mandatory)Observe live specimens of snake	CC	DK	KH	FV	P-VIVA,RK	F	II	
CO2,CO7	(Visit to casuality) -(Mandatory) Watch the procedure of resuscitation and emergency management	CK	MK	KH	FV	RK	F	I	
CO4,CO5	(Visit to occupational hazards centre)Observe the types and management of cases of occupational hazard	CK	DK	KH	FV	RK	F	II	
CO2	(Visit to ASV manufacturing centre)Observe the steps and procedures involved in ASV manufacturing	CK	DK	K	FV	RK	F	II	
CO4,CO5	Visit Cancer treatment centre.	CK	NK	K	FV	RK	F	III	
CO2,CO4	Visit to department of entomology.	CC	NK	K	FV	RK	F	II	
CO2,CO5	Visit to folklore vaidya using Agada tantra concepts in visha chikitsa.	CAP	DK	SH	FV	RK	F&S	II	
Topic 16 Topics related to regional preference									
CO2,CO3	Discuss the topics related to regional preference like bites and stings, substance abuse, texts of regional importance, regional	CAP	NK	K	L&GD	P-VIVA,M-POS	F	III	

			visha chikitsa practices, regional medico-legal issues etc.										

Table 4a: List of Practical

S.No	Name of practical	Term	Activity	Practical hrs
1	Visha Chikitsa	1	1.1 Gastric lavage 1.2 Cardiopulnomary resuscitation (CPR) 1.3 Video demonstration or visit to the emergency care unit for procedures used for removal of absorbed poison.	6
2	Vishakta Ahara Pariksha	1	2.1 Adulteration detection Tests 2.1.1 Urea in milk 2.1.2 Boric acid in milk 2.1.3 Artificial color in turmeric. 2.1.4 Artificial color in pulses and Vegetables. 2.1.5 Argemone Oil in Mustard oil 2.1.6 Adulteration in Honey	6
3	Dooshivisha, Garavisha, Visha Upadrava	1	3.1 Case based teaching on diseases due to dooshivisha and garavisha - drug induced toxicity, occupational hazards, allergic manifestations, autoimmune diseases and endocrine disruptors. 3.2 Recording 10 cases based on case based teaching or OPD and IPD exposure.	20
4	Dermatological manifestation of visha	2	4.1 Dermatological manifestations due to visha ex: contact poisoning (paduka visha, abharana visha etc.) and bites and stings. 4.2 Contact Dermatitis 4.3 Recording 10 cases based on case based teaching or OPD and IPD Exposure.	20
5	Environmental toxicology	2	5.1 Social Awareness program – Rally, street play, skit etc.	2
6	JangamaVisha	2	6.1 Identification of Poisonous and non poisonous snakes 6.2 Diagnosis based on bite marks of snakes 6.3 Diagnosis and Management of snake bite cases through audio/video case presentations or OPD/IPD exposure 6.4 Diagnosis and management of vrishchika, loota and keeta damsha cases through audio/video case presentations or	10

			OPD/IPD exposure.	
7	Sthavara visha	2	7.1 Identification of various plant poisons, metal and mineral compounds, acids, alkalis, agrochemicals, hydrocarbons and household poisons.	6
8	Substance abuse	3	8.1 Community Awareness programmes by students like rallies, street play etc. 8.1.1. Observation of international day against drug abuse and illicit trafficking. 8.1.2. World No tobacco day.	8
9	Legal Procedures	1	9.1 Hands on training on Preparation of Medical & Medico legal reports. 9.1.1 Fitness & Sickness certificate. 9.1.2 Birth & Death Certificate and other relevant medical and medico legal certificates. 9.1.3 Leaving against medical advice (LAMA), Discharge against medical advice (DAMA), Discharge on patient request (DOPR)	2
10	Vaidya Sadvritta	1	10.1 Exposure to the medical records department for understanding the storage, maintenance and disposal of medical records.	2
11	Personal Identity	1	11.1. Sex determination based on pelvis.	4
12	Thanatology	2	12.1 Procedure of autopsy: visit to mortuary or audio-visual demonstrations.	6
13	Injury	2	13.1. Hands on training on assessment of accidental, suicidal, and homicidal injuries. 13.2. Preparation of injury report.	6
14	Sexual offences	3	14.1 Introduction to Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of	2

			Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013.	
15	Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments)	2	(It is mandatory to have 5 field visits)	30
16	Topics related to regional preference	3	Exposure to topics related to regional preference like bites and stings, substance abuse, texts of regional importance, regional visha chikitsa practices, regional medico-legal issues etc.	10
			Total Hr	**140**

Activity

CO	Topic name	Activity Details	Hours#
CO3,CO4	Survey of personal care products.	Students shall be divided into small groups and are asked to collect the information about common personal care products like soaps, shampoos, deodorants, cosmetics etc. Then they sholud be asked to enlist the chemicals used in them and discuss about the health hazards associated with their use. Then students can be asked to present their findings in the form of class seminar or Charts or Posters or small videos.	4
CO5	Community teaching by students - awareness among adoloscent about Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules	After undergoing orientation/sensitization regarding Protection of Women from Domestic Violence Act (PWDV Act) 2005 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act and Rules (PoSH Act) 2013, the students will have to visit nearby schools/colleges in small teams/groups and create awareness amongst them. This can be done as part of NSS activity or exclusive visits to schools/colleges.	2

	(PoSH Act) 2013.		
CO2,CO4	Observation of international day against drug abuse and illicit trafficking	Community awareness programmes by students like rallies, street play etc.	3
CO2,CO4	No Tobacco Day	Community Awareness programmes by students like rallies, street play, skit, flash mob etc.	3
CO5	Environmental toxicology	Poster presentation competition related to environment, rallies, skit, flash mob on World Environment Day.	2
CO6,CO7	Vaidya sadvritta	Exposure to Medical records department for maintainance, storage and disposal of medical record, finding out errors in medical case reccords.	2
CO6	Forensic psychiatry	Seminar/ guest lecture on how to deal with adolescent psychiatric issue	2
CO2,CO4	Chronic toxicity of heavy metals.	Group discusion and case based learning by taking example of published case reports.	1
CO2,CO4	World Cancer Day to raise awareness of cancer risk and cancer prevention	Poster Competition / Quiz Competition / Gruop Discusion	4
CO6,CO7	Legal procedure-Recording of evidence and duties of a physician in the court of Law.	Mock court / role play	4
CO2	Sarpa Visha	1. Identification of poisonous and non poisononus snakes - Group Discussion/ Brainstorming - Specimens (Photos) of poisonous and non poisonous snakes with their features shall be given to small group of students and asked to identify the sankes. 2. Clinical diagnosis of snake bites	2

		Group Discussion - Specimens (Photos) showcasing local and systemic signs and symptoms of poisonous (Hemotoxic and Nuerotoxic) snake bite shall be given to small group of students and asked to diagnose the case. CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students	
CO2	Vrischika visha, luta visha and keeta visha.	Group Discussion - Specimens (Photos) showcasing local and systemic signs and symptoms of Vrischika Visha (Scorpion Sting), Loota Visha (Spider Bite) and Keetavisha (Insect bite) and differentiating with snake bites shall be given to small group of students and asked to diagnose the case. CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	2
CO3,CO4	Dooshivisha, garavisha and visha upadrava	Group Discussion - Photographs/case reports/ simulated cases showcasing various drug induced toxicities, occupational hazards, allergic manifestations, autoimmune diseases and diseases due to endocrine disruptors shall be given to small group of students and asked to assess the dosha, diagnose and discuss the plan of treatment.	4

		CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	
CO3,CO4	Dermatological manifestation of visha.	Group Discussion - Photographs/case reports/ simulated cases showcasing various dermatological presentations of poison, bites and stings and contact dermititis shall be given to small group of students and asked to assess the dosha, diagnose and discuss the plan of treatment. CBL - Presentation of recorded cases or the Case reports or studies published in reputed journals. Brainstorming/Quiz - The same pictures may be shown with MCQ's and Quiz session can be conducted among the groups of students.	4

Hours indicated are included in calculations of Table 3 and 4

Table 5- Teaching learning method

Sr No	Teaching learning methods in the course	No of Activities
1	Lecture	18
2	Lecture with Power point presentation	106
3	Lecture & Group Discussion	32
4	Lecture with Video clips	13
5	Discussions	22
6	Brainstorming	22
7	Inquiry-Based Learning	1

8	PBL	6
9	CBL	26
10	Flipped classroom	4
11	Edutainment	2
12	Mobile learning	2
13	Simulation	1
14	Self-directed learning	15
15	Demo on Model	2
16	Tutorial	2
17	Presentations	9
18	Practical	1
19	Case diagnosis	5
20	Demonstration	2
21	Field visit	1

These are overall teaching learning methods listed in Table 3 and 4. Teachers can select the best possible method amongst the given methods as per objective, available time etc.

Table 6: Assessment Summary: Assessment is subdivided in A to H points

6 A-Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment					
			Practical	Viva	Elective (Set SA)	IA	Sub Total	Grand Total
AyUG-AT	1	100	100	60	10	30	200	300

6 B - Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
Second	3 PA & First TT	3 PA & Second TT	3 PA & UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations.

** University Examination shall be on entire syllabus

6 C - Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 4	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/ 3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Ass essment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No	Evaluation Methods
1	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3

Evaluation Methods in MSE

1. Practical / Clinical Performance
2. Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3. Open Book Test (Problem Based)
4. Summary Writing (Research Papers/ Samhitas)
5. Class Presentations; Work Book Maintenance
6. Problem Based Assignment
7. Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8. Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9. Small Project etc.

6 E Question Paper Pattern

II PROFESSIONAL BAMS EXAMINATIONS
AyUG-AT
PAPER-1
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F Distribution of theory examination

Paper 1						
Sr. No	**A List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	**Concepts of Agada Tantra (Clinical Toxicology)**	1	13	Yes	Yes	Yes
2	**Visha Chikitsa (Management of Poisoning)**	1		Yes	Yes	Yes
3	**Vishakta aahara pariksha and Viruddha ahara**	1		Yes	Yes	No
4	**Garavisha and Dooshivisha**	1	12	Yes	Yes	Yes
5	**Visha Upadrava and diseases caused due to exposure to Visha/poisons**	1		Yes	Yes	No
6	**Environmental Toxicology**	2	11	Yes	Yes	No
7	**Dermatological manifestations of visha/poisons.**	2		Yes	Yes	No
8	**Therapeutic utility of Agada yoga**	2		Yes	Yes	No
9	**Sthavara visha – Poisons of Plant origin**	2	17	Yes	Yes	Yes
10	**Sthavara Visha – Poisons of Metallic origin**	2		Yes	Yes	Yes
11	**Jangama Visha**	2		Yes	Yes	Yes
12	**Kritrima visha**	3	12	Yes	Yes	Yes
13	**Substances of abuse**	3		Yes	Yes	Yes
14	**Agada Tantra perspectives on cancer**	3		Yes	Yes	No
15	**Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka):**	1	10	Yes	No	No

16	**Vaidya sadvritta : Duties and Responsibilities of medical practitioner**	1		Yes	Yes	No
17	**Legal Procedures**	1		Yes	Yes	No
18	**Personal identity**	1		Yes	Yes	Yes
19	**Thanatology**	2	12	Yes	Yes	Yes
20	**Asphyxial deaths**	2		Yes	Yes	Yes
21	**Injury**	2		Yes	Yes	Yes
22	**Pregnancy, delivery and abortion**	3	6	Yes	Yes	No
23	**Sexual offences**	3		Yes	Yes	No
24	**Forensic psychiatry.**	3	7	Yes	Yes	No
25	**Forensic science laboratory**	3		Yes	Yes	No
26	**Laws, Acts, Rules and Regulations**	3		Yes	Yes	No
Total Marks			**100**			

6 G Blue print of paper I

Paper No:1		
Question No	**Type of Question**	**Question Paper Format**
Q1	**Multiple choice Questions** **20 Questions** **1 mark each** **All compulsory** **Must know part - 15 MCQ** **Desirable to know - 3 MCQ** **Nice to know part - 2 MCQ**	**1.** Concepts of Agada Tantra (Clinical Toxicology) **2.** Visha Chikitsa (Management of Poisoning) **3.** Vishakta aahara pariksha and Viruddha ahara **4.** Garavisha and Dooshivisha **5.** Visha Upadrava and diseases caused due to exposure to Visha/poisons **6.** Asphyxial deaths **7.** Dermatological manifestations of visha/poisons. **8.** Therapeutic utility of Agada yoga **9.** Kritrima visha / Sthavara Visha – Poisons of Metallic origin **10.** Jangama Visha **11.** Substances of abuse **12.** Agada Tantra perspectives on cancer **13.** Vaidya sadvritta : Duties and Responsibilities of medical practitioner / Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka): **14.** Legal Procedures / Injury **15.** Pregnancy, delivery and abortion / Thanatology **16.** Environmental Toxicology / Personal identity **17.** Forensic psychiatry. / Forensic science laboratory **18.** Laws, Acts, Rules and Regulations **19.** Sthavara visha – Poisons of Plant origin **20.** Sexual offences
Q2	**Short answer Questions** **Eight Questions** **5 Marks Each** **All compulsory** **Must know - 7 SAQ** **Desirable to know - 1 SAQ** **No questions on Nice to know**	**1.** Vishakta aahara pariksha and Viruddha ahara / Visha Upadrava and diseases caused due to exposure to Visha/poisons / Garavisha and Dooshivisha **2.** Visha Chikitsa (Management of Poisoning) / Therapeutic utility of Agada yoga / Dermatological manifestations of visha/poisons. **3.** Kritrima visha / Sthavara visha – Poisons of Plant origin / Environmental Toxicology / Sthavara Visha – Poisons of Metallic origin **4.** Jangama Visha / Concepts of Agada Tantra (Clinical Toxicology) / Vaidya sadvritta : Duties and Responsibilities of medical

		practitioner **5.** Environmental Toxicology / Agada Tantra perspectives on cancer / Substances of abuse **6.** Asphyxial deaths / Personal identity / Injury **7.** Pregnancy, delivery and abortion / Sexual offences / Personal identity **8.** Forensic psychiatry. / Forensic science laboratory / Laws, Acts, Rules and Regulations
Q3	**Long answer Questions** **Four Questions** **10 marks each** **All compulsory** **All questions on must know. No Questions on Nice to know and Desirable to know**	**1.** Visha Chikitsa (Management of Poisoning) / Concepts of Agada Tantra (Clinical Toxicology) **2.** Jangama Visha / Garavisha and Dooshivisha **3.** Kritrima visha / Sthavara visha – Poisons of Plant origin / Sthavara Visha – Poisons of Metallic origin / Substances of abuse **4.** Thanatology / Asphyxial deaths / Personal identity / Injury

6 H Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting (15 specimens of 4 marks each) 1.1. Snake – 2 specimens 1.1.1 Identification - 1 mark 1.1.2 Differentiating features of poisonous/ non-poisonous snake – 1 mark 1.1.3 Important clinical signs - 1 mark 1.1.4 Ayurvedic management - 1 mark1.2. Mineral poisons/ Kritrima visha (1 specimen each)-2 specimens 1.2.1. Identification - 1 mark 1.2.2 Identification of symptom clusters mimicking other diseases and their differential diagnosis - 2 marks 1.2.3 Method of detoxification and Antidotes - 1 mark1.3. Toxic plants– 2 specimens 1.3.1 Identification with scientific, family and sanskrit names 1 mark 1.3.2 Mode of use in Visha cases – 1 mark 1.3.3 detoxification method, Class of poison and Active principles present in the plant - 1 mark 1.3.4 Antidotes used against the specimen - 1 mark1.4. Antitoxic plants – 3 specimens 1.4.1 Identification with scientific, family and sankrit names - 1 mark 1.4.2 Mode of use in visha - 1 mark 1.4.3 Active principles - 1 mark 1.4.4 Important formulations - 1 mark1.5. Injuries – 2 specimens 1.5.1. Identify the injury - 1 mark 1.5.2. Identify the weapon/criminal act causing such injury - 2 mark 1.5.3. Medico-legal importance - 1 marks1.6. News item – paper cuttings or other medico-legal case scenarios – 2 specimens 1.6.1. Identify the crime – 1 mark	60

	1.6.2. Relevant IPC/CrPC sections associated with the crime – 1 mark 1.6.3. Relevant Act related to the crime – with sub-questions related to its sub- sections, punishment etc. - 2 marks7. Jangama visha – other poisonous creatures – 2 specimens 1.7.1. Identification – 1 mark 1.7.2. Adhishtana/samanya lakshana/ chikitsa – 2 marks 1.7.3. specific formulations/doses – 1 mark(Sub-questions mentioned against each item is for a purpose of example only. Different questions may be framed on the various aspects of the guidelines provided)	
2	Practical Records	10
3	Medical and Medico-legal Certificate WritingStudents will be provided with a case-scenario based on which they are asked to write a medical certificate for a specific purpose. Evaluation guidelines should be based on the essential criteria in the format of a valid medical certificate.	10
4	Short CaseCase scenarios with pictures to diagnose a specific case of poisoning and specific questions asked regarding its clinical examination, investigations, treatment, prognosis etc.	10
5	Clinical Applications of Agada • Identification of Agada for a case scenario detailed – 2 marks • Select the ingredients of the formulation from a group of drugs and identify using scientific names and answer sub-questions based on its preparation, anupana, dose etc. – 8 marks	10
6	Viva Questions will be asked on the following topics • Agada Tantra (2 questions 5 marks each) - 10 marks • Forensic Science (Vyavaharayurveda) (2 questions 5 marks) - 10 marks • Jurisprudence (Vidhivaidyaka) (2 questions 5 marks) - 10 marks • Toxicology (2 questions 5 marks each) - 10 marks • Concepts of Agada Tantra in cancer and substance abuse (one question from each) (2 questions 5 marks each) - 10 marks • Viva on Compilation and Communication skills (2 questions 5 marks each) - 10 marks	60

7	Electives (Set SA)	10
8	IA	30
Total Marks		**200**

References Books/ Resources

S.No	Book	Author(s)/Resources
1	Concise Forensic Medicine & Toxicology	**KS Narayana Reddy, Jaypee Medical Publisher**
2	Essentials ofForensic Medicine & Toxicology	**K S Narayana Reddy, Jaypee Medical Publisher**
3	Principles of Forensic Medicine & Toxicology	**Rajesh Bardale, Jaypee Medical Publisher**
4	Modern Medical Toxicology	VV Pillay, Jaypee Medical Publisher
5	Recent Advances in Forensic Medicine and Toxicology (Volume 1 & 2)	Gautam Biswas, Jaypee Medical Publisher
6	Textbook on Medicolegal Issues: Related to Various Medical Specialties by Satish TiwariMahesh BaldwaMukul TiwariAlka Kuthe	Jaypee Medical Publisher
7	Manual on Doctor and Law	RN Goel Narendra, Malhotra Shashi Goel, Jaypee Medical Publisher
8	Jaypee's Video Atlas of Medicolegal Autopsy	Sujith Sreenivas C Prasannan K Thomas Mathew, Jaypee Medical Publisher
9	Jaypee Gold Standard Mini Atlas Series Forensic Medicine by Ashesh Gunwantrao Wankhede	Jaypee Medical Publisher
10	MODI's Textbook of Medical Jurisprudence and Toxicology	K Kannan, Jaypee Medical Publisher
11	A Text book of Agada Tantra	Dr Shobha Bhat, Chaukamba Orientalia
12	Agada Tantra	Dr Ramesh Chandra Tiwari, Chaukamba Orientalia
13	Text Book of Agad Tantra Evam Vyavaharayurveda	Dr Sandeep Charak Dr.Piyush Gupta Dr Divya Tiwari, Ayurveda Sanskrit Hindi Pustak Bhandar.
14	Ayodhyaprasad Achal'sAgada Tantra	Dr Jina Patnaik, Chaukamba Surbharati Prakashan
15	Illustrated Agada Tantra	Dr PVNR Prasad, Chaukamba Sanskrit Series Varanasi
16	Textbook on Agada Tantra	DR V P JOGLEKAR, RASHTRIYA SHIKSHAN MANDAL, PUNE
17	Review of Forensic Medicine and Toxicology by Dr Gautam Biswas	Jaypee Medical Publisher
18	Toxicology - An Ayurvedic Perspective	Department of Agadtantra, Vaidyaratnam PS Varier Ayurveda College, Kottakkal

Abbreviations

Assessment

S.No	Short form	Discription
1	T-EMI	Theory extended matching item
2	T- EW	Theory Essay writing
3	T- MEQs	Theory MEQs
4	T-CRQs	Theory CRQs
5	T-CS	Theory case study
6	T-OBT	Theory open book test
7	P-VIVA	Practical Viva
8	P-REC	Practical Recitation
9	P-EXAM	Practical exam
10	PRN	Presentation
11	P-PRF	Practical Performance
12	P-SUR	Practical Survey
13	P-EN	Practical enact
14	P-RP	Practical Role play
15	P-MOD	Practical Model
16	P-POS	Practical Poster
17	P-CASE	Practical Case taking
18	P-ID	Practical identification
19	P-PS	Practical Problem solving
20	QZ	Quiz
21	PUZ	Puzzles
22	CL-PR	Class Presentation,
23	DEB	Debate
24	WP	Word puzzle
25	O-QZ	Online quiz

26	O-GAME	Online game-based assessment
27	M-MOD	Making of Model
28	M-CHT	Making of Charts
29	M-POS	Making of Posters
30	C-INT	Conducting interview
31	INT	Interactions
32	CR-RED	Critical reading papers
33	CR-W	Creativity Writing
34	C-VC	Clinical video cases,
35	SP	Simulated patients
36	PM	Patient management problems
37	CHK	Checklists
38	OSCE	OSCE
39	OSPE	OSPE,
40	Mini-CEX	Mini-CEX
41	DOPS	DOPS
42	CWS	CWS
43	RS	Rating scales
44	RK	Record keeping
45	COM	Compilations
46	Portfolios	Portfolios
47	Log book	Log book
48	TR	Trainers report
49	SA	Self-assessment
50	PA	Peer assessment
51	360D	360-degree evaluation
52	TT-Theory	Theory
53	PP-Practical	Practical
54	VV-Viva	Viva

Domain

S.No	Short form	Discription
1	CK	Cognitive/Knowledge
2	CC	Cognitive/Comprehension
3	CAP	Cognitive/Application
4	CAN	Cognitive/Analysis
5	CS	Cognitive/Synthesis
6	CE	Cognitive/Evaluation
7	PSY-SET	Psychomotor/Set
8	PSY-GUD	Psychomotor/Guided response
9	PSY-MEC	Psychomotor/Mechanism
10	PSY-ADT	Psychomotor Adaptation
11	PSY-ORG	Psychomotor/Origination
12	AFT-REC	Affective/ Receiving
13	AFT-RES	Affective/Responding
14	AFT-VAL	Affective/Valuing
15	AFT-SET	Affective/Organization
16	AFT-CHR	Affective/ characterization

T L method

S.No	Short form	Discription
1	L	Lecture
2	L&PPT	Lecture with Power point presentation
3	L&GD	Lecture & Group Discussion
4	L_VC	Lecture with Video clips
5	DIS	Discussions
6	BS	Brainstorming
7	IBL	Inquiry-Based Learning
8	PBL	PBL
9	CBL	CBL
10	PrBL	Project-Based Learning
11	TBL	TBL
12	TPW	Team project work
13	FC	Flipped classroom
14	BL	Blended Learning
15	EDU	Edutainment
16	ML	Mobile learning
17	ECE	ECE
18	SIM	Simulation
19	RP	Role plays
20	SDL	Self-directed learning
21	PSM	Problem solving method
22	KL	Kinesthetic Learning
23	W	Workshops
24	GBL	Game-Based Learning
25	D-M	Demo on Model

26	LS	Library Session
27	PL	Peer learning
28	RLE	Real life experience
29	REC	Recitation
30	SY	Symposium
31	TUT	Tutorial
32	PER	Presentations
33	PT	Practical
34	XRay	X ray identification
35	CD	Case diagnosis
36	LRI	Lab report interpretation
37	DA	Drug analysis
38	D	Demonstration
39	D_BED	Demonstration bedside
40	D_L	Demonstration Lab
41	DG	Demonstration Garden
42	FV	Field visit
43	PRA	Practical

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



SAMSKRITAM EVAM AYURVED ITHIHAS
(SUBJECT CODE-AyUG-SN & AI)`
SANSKRIT AND HISTORY OF AYURVEDA
(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism
प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME
Sanskritam

NCISM
I professional Ayurvedacharya
(BAMS)

SAMSKRITAM EVAM AYURVED ITHIHAS
(SUBJECT CODE-AyUG-SN & AI)
SANSKRIT AND HISTORY OF AYURVEDA
(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

Summary

AyUG-SN & AI Total number of Teaching hours: 300			
Lecture hours (LH) – Theory		**100 Hours**	**100 Hours (LH)**
Paper I	50 Hours		
Paper II (Sanskrit 40+ AI 10)	50 Hours		
Non-Lecture hours (NLH) – Theory		**140 Hours**	**200 Hours (NLH)**
Paper I	74 Hours		
Paper II (Sanskrit 46+ AI 20)	66 Hours		
Non-Lecture hours (NLH) – Practical		**60 Hours**	

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks AyUG-SN & AI**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100** Sanskrit 100 Marks	**--**	**75***	**10 (Set-FA)**	**15**
Paper II	**100** Sanskrit 80 Marks and Ayurved Itihas 20 Marks				
Sub-Total	**200**	**100**			
Total marks	**300**				
	*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa				

Preface

Sanskrit is an ancient still most scientific language of India. The ancient literature created about various subjects in this region is in Sanskrit. The richness of Sanskrit language is accepted by intellectuals across the world. The literature of Ayurveda is also found in Sanskrit. Without understanding the language of the science, it is really hard to read and understand the terminologies, theories, principles of the science given in the Samhitas. Many of the students coming for the course partly introduced or not at all introduced to the Sanskrit language previously. Hence for understanding Ayurveda in its originality, Sanskrit is one of subject in First year BAMS curriculum. Similar to any language Listening, Reading, Writing and Speaking are the four pillars of a sanskrit. Reading, writing and understanding samhitas will be emphasized and listening and speaking can give confidence to the student and enhance the study.

Learning a language just by studying the theory is not enough hence curriculum of Sanskrit is designed by combining traditional Sanskrit teaching with new teaching health science education technologies.

This changed curriculum involves many new teaching learning techniques and assessment methods. Based on the course outcomes, curriculum is devided in papers. Importantent objectives are appropriately planned as per domains of learning. Supported by interactive methods of teaching and learning by using Audio-visual aids. There will be practicals and demonstrations based on Language Lab activities for enhancement of practical use of Sanskrit. Practicals can give a chance of acquiring skills by practice of use of Sanskrit in Samhitadhyayan. Application of learned Sanskrit will be practically ensured by reading newly introduced Ashtang Hrudayam. Students can experience of application of Sanskrit Grammer in Samhitadhyayan. Introduction to Niruktis, dictionaries and Shabdakoshas can motivate students to derive and understand meanings from Sanskrit verses on their own. As this is a language, learning to communicate in this language is very much essential. Addition of Sanskrit communication as a part of curriculum is for overcoming the fear of learning a new language.

History of Ayurved is also added in second part of the Sanskrit. As an ancient science, its gradual development. Important milestones, different Schools of thoughts, impotant traditions, followers in traditions, thier contribution etc will be introduced in History. Contribution of Scholars of modern era, Important institutes and globalization are few more points for history. Activity based learning and objective assessment are the most important changes to change perception towards study of history.

Index

Course Code and Name of Course 5
AyUG SN & AI 5
Table 1- Course learning outcomes and matched PO. 5
Sanskrit 5
Ayurved Itihas 5
Table 2 : Contents of Course AyUG SN & AI 6
Paper I Sanskrit 6
Paper II – Part A Sanskrit 9
Paper II – Part B – Ayurved Itihas 11
Table 3: Learning objectives (Theory) of Course AyUG-SN & AI 13
Paper I – Sanskrit 13
Paper II Part A - Sanskrit Learning Objective 23
PAPER II Part B Ayurved Itihas 26
List of Practicals 34
Table 4: Learning objectives (Practical) of AyUG- SN & AI 35
Sanskrit Practical 35
Table 5: Non Lecture Activities Course AyUG- SN & AI 38
Ayurved Itihas- 38
Table 6: Assessment Summary 39
6 A-Number of Papers and Marks Distribution 39
6 B - Scheme of Assessment (formative and Summative) 39
6 C - Calculation Method for Internal assessment Marks (15 Marks) 39
6 D- Evaluation Methods for Periodical Assessment 40
6 E- Paper Layout 41
PAPER-I 41
PAPER-II 41
6 F- Disribution of Theory Exam 42
Paper I: Sanskrit 42
Paper II 46
Part A Sanskrit 46
Part B 47
6 G- Question paper blue print 47
Paper I – Sanskrit 47
Paper II – Sanskrit and Ayurved Itihas 48
6 H - Distribution of Practical Exam 50
7. References/ Resourses 51
Sanskrit 51
Ayurved Itihas 52

Course Code and Name of Course

	Course code	Name of Course
	AyUG SN & AI	**Sanksrit and Ayurved Itihas**

AyUG SN & AI Course

Table 1- Course learning outcomes and matched PO.

SR1 CO No	**A1 Course learning Outcome (CO) AyUG SN & AI At the end of the course AyUG SN & AI, the student should be able to-**	**B1 Course learning outcomes matched with program learning outcomes.**
Sanskrit		
CO1	Read and recite Prose (गद्य:) and poem (पद्य:) with the appropriate accent (उच्चारणस्थानानि तथा बाह्याभ्यरप्रयत्नानि). उच्चारणस्थानानां बाह्याभ्यन्तरप्रयत्नानां च सहाय्येन पाठने तथा लेखने सामर्थ्यम् |	PO-5, PO-6, PO-7, PO-8, PO-9
CO 2	Apply various Technical Terms in Ayurveda (परिभाषाशब्दा:), Nouns & Pronouns (नामरूपाणि तथा सर्वनामरूपाणि), Verbs (धातुरूपाणि), suffixes (प्रत्यया:), Grammatical Terms (संज्ञा), Syntax (संधी) and Compounds (समासा:) from Sanskrit Grammar for enhanced interpretation of Ayurveda texts (आयुर्वेद संहिता:). परिभाषाशब्देषु नामरूपेषु सर्वनामरूपेषु क्रियापदेषु प्रत्ययेषु संज्ञासु सन्धिषु समासेषु च ज्ञानं तद्द्वाराआयुर्वेदसंहितासु अर्थावबोधनम् प्रायोगिकविज्ञानञ्च |	PO-5, PO-7, PO-9
CO 3	Discriminate and interpret the Cases & meanings (विभाक्त्यर्थ) used in various verses of Ayurveda texts (आयुर्वेद संहिता). कारकविभक्त्यर्थादिषु परिज्ञानं तथा आयुर्वेदसंहितासु तेषां प्रयोगपरिचयञ्च |	PO-5, PO-7, PO-9
CO 4	Formulate the Prose order (अन्वय:) of Slokas/Sutras in Ayurveda Textbooks (संहिता) to derive the meaning (वाच्यार्थ), to determine the Scientific Meaning (शास्त्रार्थ) and to Translate (Regional or other language). अन्वयलेखने वाच्यार्थावबोधने शास्त्रार्थावबोधने च सामर्थ्यं अनुवादनपाटवञ्च |	PO-5,PO-6, PO-7, PO-8, PO-9
CO 5	Interpret the Synonyms (पर्याया:) and Derivations (निरुक्ति) of Ayurveda Terms using samskrita dictionaries (संस्कृत शब्दकोश). कोशग्रन्थानां सहाय्येन आयुर्वेदे विद्यमानानां पदानां तेषां पर्यायानाञ्च निरुक्तिपूर्वक परिज्ञानं तेषां प्रयोगे परिचयञ्च |	PO-5, PO-7, PO-9
CO 6	Speak, Write and Summarize and Express in Samskrit (संस्कृतम्). संस्कृतभाषायां भाषणे लेखने सङ्क्षिप्य लिखने अर्थप्रकाशने च सामर्थ्यम् |	PO-5,PO-6, PO-7, PO-8, PO-9
CO 7	Develop the ethical responsibility towards the profession, society and human being. सामाजिक- औद्योकिक-मानुषिक धर्मबोधता	PO-6 & PO-8
Ayurved Itihas		
CO 8	Analyse and explain the important milestones in the history of Ayurveda	PO-1
CO 9	Appreciate the status of Ayurveda in different time periods and Contributions made by different Acharyas to Ayurveda.	PO-1

Table 2 : Contents of Course AyUG SN & AI

Sr No	A2 List of Topics AyUG-SN & AI Paper I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours
Paper I Sanskrit					
1	संस्कृतवर्णानाम् परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तर प्रयत्नानि	**I**	**05**	**3**	**10**
2	संज्ञा- **2.1** - संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धिः [विस्तरेण पाठनम् - Detailed teaching] **2.2 -** इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्, [सङ्क्षिप्य पाठनम् – Brief teaching]	**2.1 – I** **2.2 – II**	**05**	**05**	**-**
3.	उपसर्गाः- उपसर्गाः क्रियायोगे प्र, परा, अप, सम्, अनु, अव, निस्, निर्, दुस्, दुर्, वि, आङ्, नि, अपि, अधि, अति, सु, उत्, अभि, प्रति, परि, उप |	**II**	**05**	**02**	**03**
4.	अव्ययानि **4.1 -** च अपि खलु हि तु किल ननु वा च एव **4.2-** पुनः विना उच्चैः ऋते एवम् सह सार्धम् युगपत् यथा –तथा यावत्-तावत् इति यदा-तदा यदि-तर्हि साकम् न कुत्र कति कुतः किमर्थम्, कियत् इह अत्र तत्र सर्वत्र अन्यत्र कुत्र एकत्र सदा अन्यथा एकथा [विस्तरेण पाठनम् - detailed teaching] A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि	I A II B III C	**5**	**I -01** **II-01**	**I-0** **II-0** **III-03**
5.	कारकप्रकरणम् – कर्तृकारकम् , कर्मकारकम् , करणकारकम् , सम्प्रदानकारकम्, अपादान कारकम्, अधिकरणकारकम् , सम्बन्धः, उपपदविभक्तिः सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि | A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like **करणम्** **कारणम्** C) Construct sentences D) Translate sentences from English to Sanskrit & from Sanskrit to English.	I A II B III C, D	**15**	**I- 05**	**II-05** **III-05**
6.	सन्धिः **6.1 -** अच् सन्धिः/स्वरसन्धिः - यण् सन्धि -इको यणचि, गुण सन्धिः=आद्गुणः वृद्धिसन्धिः-वृद्धिरेचि, अयवायाव सन्धिः - एचोऽयवायवः/वान्तो यि	**II**	**15**	**10**	**10**

	प्रत्यये, लोप सन्धि:-लोप: शाकल्यस्य, पररूपसन्धि:-एङि पररूपम्, पूर्वरूपसन्धि- एङ: पदान्तादति, प्रकृतीभाव- सर्वत्र विभाषा गोः , प्लुत प्रगृह्य अचि नित्यम् | **सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि** | **6.2 -** हल्सन्धि: /व्यञ्जनसन्धि: - श्चुत्वसन्धि:- स्तो: श्चुना श्चु:, ष्टुत्वसन्धि:- ष्टुना ष्टु:, जश्त्व सन्धि:-झलां जशो/न्ते, अनुनासिकसन्धि:- यरोऽनुनासिकेऽनुनासिको वा/प्रत्यये भाषायां नित्यम्, परसवर्णसन्धि:-तोर्लि:/वा पदान्तस्य, चर्त्वसन्धि: खरि च, पूर्वसवर्णसन्धि:-झयोऽहोऽन्यतरस्याम्, छुत्वसन्धि: शश्छोऽटि/ छत्वममीति वाच्यम्, अनुस्वारसन्धि:- मोऽनुस्वार:, तुगागमसन्धि:- शि तुक्/छे च/पदान्ताद्वा, रुत्वआदेशसन्धि:-नश्छव्यप्रशान् **सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि |** **6.3 -** विसर्गसन्धि: - रुत्वसन्धि:-ससजुषो रु:, उत्वसन्धि:-अतो रोरप्लुदादप्लुते/हशि च, रो रि, भो भागो अघो अपूर्वस्य योऽशि , रोऽसुपि , एतत्तदोः सुलोपोऽकोरनञ् समासे हलि, सोऽचि लोपे चेत् पादपूरणम् | सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि | **6.4.-** रुत्वप्रकरणसन्धि:- [सङ्क्षिप्य पाठनम् – Brief teaching] सम: सुटि, कानाम्रेडिते च, अत्रानुनासिको पूर्वस्य तु वा,अनुनासिकात्परोऽनुस्वार:, खरवसानयोर्विसर्जनीय:, विसर्जनीयस्य स:,सम्पुङ्कानां सो वक्तत्च्व्य: |				
7.	**समास** **7.1 -** अव्ययीभावसमास: - **7.1.1 -** अव्ययम् विभक्तिसमीपसमृद्धिव्यर्ध्यर्थाभावात्ययसम्प्रतिशब्दप्रादुर्भावपश्चायथानुपूर्व्ययौगप द्यसादृउश्यसम्पत्तिसाकल्यान्तवचनेषु | **7.1.2. -** प्रथमा निर्दिष्टम् उपसर्जनम्,/ उपसर्जनं पूर्वम् /नाव्ययीभावादतो/ म् त्वपञ्चम्या:/ तृतीयासप्तम्योर् बहुलम्/अव्ययीभावे चाकाले | **7.2. -** तत्पुरुष समास: - द्वितीया श्रितातीतपतितगतात्यस्तप्राप्तापन्नै:, तृतीया तत्कृतार्थेन गुणवचनेन, कर्तृकरणे कृता बहुलम्, चतुर्थी तदर्थार्थ बलिहितसुखरक्षितै:, पञ्चमीभयेन, षष्ठी, सप्तमीशौण्डै:, विशेषणं विशेष्येणबहुलम्, उपमानानि सामान्यवचनै:, नञ्, कर्मधारय, द्विगु:, उपपद तत्पुरुष **7.3 -** बहुव्रीहि समास: - अनेकमन्यपदार्थे **7.4 -** द्वन्त्वसमास: - चार्थे द्वन्द्व: सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि |	**II**	**15**	**09**	**10**
8.	शब्दरूपणि **8.1 -** पुल्लिङ्ग:शब्दरूपाणि अकारान्त: - वात, वैद्य, रुग्ण, राम आदि इकारान्त: - अग्नि, मुनि आदि उकारान्त: - ऋतु, भानु गुरु आदि ऋकारान्त: - नृ, धातृ, पितृ आदि	**I**	**10**	**02**	**14**

	ओकारान्त: - गो आदि नकारान्त – श्लेश्मन्, रोगिन्, ज्ञानिन् आदि सकारान्त – चन्द्रमस् आदि तकारान्त – मरुत् आदि दकारान्त – सुहृद् आदि जकारान्त – भिषज्, आदि शकारान्त: - कीदृश्, एतादृश् आदि **8.2 -** स्त्रीलिङ्ग:शब्दरूपाणि आकारान्त: - बला, कला, स्थिरा, माला आदि इकारान्त: - सम्प्राप्ति, प्रकृति, मति आदि ईकारान्त: - धमनी, नदी आदि उकारान्त: - रज्जु, धेनु आदि ऊकारान्त: - वर्षाभू, वधू आदि ऋकारान्त: - मातृ आदि चकारान्त: - वाच् आदि तकारान्त: - योषित्, सरित् आदि दकारान्तः – परिषद् आदि जकारान्त: - स्रज् आदि सकारान्त: - जलौकस्, सुमनस् आदि षकारान्तः – प्रावृष् आदि **8.3 –** नपुंसकलिङ्ग शब्दरूपाणि अकारान्त: - पित्त, वन आदि उकारान्त: - अश्रु, मधु आदि इकारान्त: - अक्षि, अस्थि, वारि, दधि आदि ऋकारान्त: - ज्ञातृ, धातृ आदि नकारान्त: - वर्त्मन्, दण्डिन् आदि सकारान्त: - स्रोतस्, मनस् आदि षकारन्तः – सर्पिष्, आयुष् आदि तकारान्त: - शकृत्, जगत् आदि अष्टाङ्गहृदयसंहितायाम् विद्यमानानाम् अन्यानामपि समाननामरूपाणाम् परिचयकरणम् अभिलषणीयम् | प्रश्नपत्रे न प्रष्टव्यम् | **8.4 -** सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम् आदि				
9.	धातुरुपाणि – [विस्तरेण पाठनम्-detailed teaching] **9.1 -** परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादि गण - भू सत्तायाम्, क्षि क्षये, गमॢ(गम्) गतौ, पा पाने, जीव्, पच्, त्यज्, दृश् (पश्य) अदादि गण - अद् भक्षणे , हन् हिम्सागत्यो:, वा गतिगन्धनयो: पा रक्षणे, अस्, श्वस्, स्वप्, ब्रू जुहोत्यादि गण- धा धारणपोषणयो:, पॄ - पलनपूरणयो:, हा त्यागे, दा (दाञ्) दिवादि गण- दिवु क्रीडादौ, त्रसी उद्वेगे, पुष् पुष्टौ, कुप्, नश्, तुष्, स्निह्, जॄ स्वादि गण- चिञ् चयने, शक्, श्रु तुदादि गण- तुद् व्यथने, कृष् विलेखने, लिख् लेखने, दिश्, कृन्त्, क्षिप्, स्पृश्	**I**	**10**	**05**	**05**

	रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे, भुज् तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ् -तर्पणे कान्ते च, ग्रह् उपादाने, ज्ञा चुरादि गण- गण् संस्थाने, साध्, ताड्, धृ, कथ् वाक्यप्रबन्धे आत्मनेपदि- भ्वादि गण - वृतु वर्त्तने, वृध्(वर्ध्), लभ्, सेव्, रुच् अदादि गण - शीङ् स्वप्ने, ब्रू जुहोत्यादि गण- धा धारणपोषणयो:, दा (दाञ्), दिवादि गण- जनी प्रादुर्भाव, मन्, बुध्, पद्, विद् स्वादि गण- चिञ् चयने, तुदादि गण- तुद् व्यथने, कृष् विलेखने, म्रि, विद्, मुच्, सिञ्च्, रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे, भुज् तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ् -तर्पणे कान्ते च, ग्रह् उपादाने, ज्ञा चुरादि गण- चुर्, क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासु विद्यमानानां धतुरूपाणां परिचयीकरणम् अभिकाम्यम् **9.2 -** लृड्ग , आशीर्लिङ्ग, लिट , लुङ्ग, लुड [सङ्क्षिप्य पाठनम्-Brief teaching] भ्वादि गण, अदादि गण, जुहोत्यादि गण, दिवादि गण, स्वादि गण, तुदादि गण, रुधादि गण, तनादि गण, क्र्यादि गण, चुरादि गण पूर्वोक्तधातुष्वेकस्य पञ्चलकारेषु रूपाणि दर्शयेत् | परं परीक्षायाम् न पृष्टव्यानि |				
10.	प्रत्ययाः **10.1** – क्त - क्तवत्, तव्यत् – अनीयर्, शतृ – शानच्, ल्युट् - ण्वुल्, क्त्वा - ल्यप्, णिनि:, क्तिन्, तुमुन् प्रत्ययाणाम् प्रयोगा: एव पृष्टव्या: | **10.2 -** भावे घञ्, करणे घञ्, भावे ष्यञ्, कर्मणि ण्यत्, कर्त्तरि अच् अप् आयुर्वेदसंहितायां विद्यमानानां भावे/करणे/कर्त्तरि/ताच्छील्ये/ आदि प्रत्ययानां परिचय: करणीय: | परं परीक्षायाम् न पृष्टव्या: | परीक्षायाम् वाच्य प्रयोग: स्वरुपे पृष्टव्य: |	**II**	**10**	**05**	**6**
11	विशेषण विशेष्य	**II**	**05**	**02**	**03**

Paper II – Part A Sanskrit					
	A2 **List of Topics** **(Maximum Marks – 80 (SAQ & LAQ only)**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	निरुक्ति तथा पर्याय पदानि– A) आयु:, शरीर, मन:, अग्नि:, जलम्, वात:, पित्तम्, कफ: B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र, इन्द्रियम्,श्रोत्र:, चक्षु:, रसना ,, घ्राण C)) धी, धृति, स्मृति,बुद्धी, मति , प्रज्ञा , मूत्र, पुरीष:, स्वेद, आत्मा, रोग:,निदानम्,	A- **I** B – **II** **C- III**	**15**	**7** **(A-1, B-3, C-3)**	**13** **(A- 4, B-4, C-5)**

	रोगि:, भेषजचिकित्सा , आदि				
2	परिभाषापदानि – A) आयुर्वेद:, पञ्चमहाभूतानि, त्रिगुणम्, दोषा:, मला:, दूष्यम्, सम्सर्ग:, सन्निपात: B) द्रव्य ,गुण, कर्म ,सामान्य, विशेष, गुरु, लघु, प्रकृति:, विकृति:,चय:, प्रकोप:, प्रसर:, स्थानसम्श्रय:, दोषगति: भेद:, रस:, वीर्यम्, विपाक:, कार्यकारणभाव: **C)** स्रोतस् , कोष्ठ:, आमम्, विरुद्धान्नम्, विरुद्धाहार:, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्ग:, अवस्थापाक:, वेग:, शोधन, शमन, लंघन, बृहण, अनुपान आदि	A - **I** B **- II** **C- III**	**20**	**10** **(A-2, B-4, C- 4)**	**15** **(A- 5, B-5, C-5)**
3.	अन्वयलेखनम् - A) अष्टाङ्गहृदयम् सूत्रस्थानम् **- अध्याय: सर्वाणि सूत्राणि** १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् **B)** अष्टाङ्गहृदयम् सूत्रस्थानम् **- अध्याय: सर्वाणि सूत्राणि** दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् **- shloka numbers – (**भास्कर गोविन्द घाणेकर लिखित, चौखम्बा प्रकाशन) प्रथम: 1, 2 द्वितीय: 1, 7 तृतीय: 9 चतुर्थ: 2, 3 पञ्चम: 2, 3 षष्ठ: 1, 4, 7 सप्तम: 2, 5, 17 अष्टम: 13, 12 नवम: 12, 13 दशम: 1, 19 एकादश: 1, 2 द्वादश: 1, 6 त्रयोदश: 1, 7, 8, 9	A - **I** B - **II** C - **III**	**30**	**20** **(A- 4, B- 8, C- 8)**	**14** **(A- 4, B- 5, C- 5)**

	चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4 श्लोकपूरणं न प्रष्टव्यम् परीक्षायाम्। पदच्छेदं विग्रहवाक्यम् अन्वय: वाक्यार्थं भावार्थं इत्यादय: एव प्रष्टव्या: ।				
4.	पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय कथा -१ नापितक्षपणक कथा कथा-२ नकुलीब्राह्मणी कथा कथा-३ चक्रधर कथा कथा-४ सिंहकारक मूर्खपण्डितकथा कथा-५ मूर्खपण्डित कथा श्लोकपूरणं तथा अन्वयलेखनं न प्रष्टव्ये।	**III**	**15**	**03**	**04**

Paper II – Part B – Ayurved Itihas –					
	A2 **List of Topics AyUG SN & AI** **(Maximum Marks – 20 (MCQ only)**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	Derivation (Vyutpatti and Niruktti) and definition of Itihasa. Necessity, Significance and Utility of knowledge of Ayurveda itihasa. Means and method of study of Ayurveda itihasa. Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.)	**I**	**5**	1	2
2	Origin and lineage of Ayurveda (Ayurvedavatarana) and Introduction of references of Ayurveda in Veda, Upanishat and Puarana.	**I**		1	2
3	Structure, Specialities, Time period of Ayurveda Samhitas and their commentaries (including Special contributions of authors and commentators): Charaka Samhita, Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hridaya, Bhela Samhita, Hareeta Samhita, Kashyapa Samhita.	**I**	**5**	2	2

4	Structure, Contributions and importance of Laghutrayee and Commentaries: Madhava Nidana, Sharngadhara Samhita, Bhavaprakasha.	**II**		1	3
5	Origin and period of different systems of medicine in the world.	**II**	**5**	1	2
6	Introduction to Vrukshayurveda, Hastyayurveda and Ashwayurveda. (Included in Transitional Curriculum)	**II**		-	1
7	Status of Ayurveda during the period of Ashoka, Mughal and British rule.	**II**		1	2
8	Contribution of Scholars of modern era: Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale.	**III**	**5**	1	2
9	Globalization of Ayurveda	**III**		1	2
10	1)Developmental activities in Ayurveda in the post-independence period: • Introduction to various committees and their recommendations • Introduction of activities of the following Organizations : Department of AYUSH, CCIM/ NCISM, CCRAS, 2) National institutions Viz- All India Institute of Ayurved (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi.	**III**		1	2

Table 3: Learning objectives (Theory) of Course AyUG-SN & AI

Paper I – Sanskrit									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the Students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- संस्कृतवर्णानाम् परिचयः **(5** marks) **Time: 13 hrs** (Lecture:- **3** hours Non lecture**10** hrs)									
CO 1, CO 6	Read & write Sanskrit words	Cognitive domain - Knowledge	Must know	Khows how .	Practical classes Demonstrations Classroom reading	Oral Written	F&S	I	
CO 1, CO 6	Pronounce Sanskrit as per their appropriate articulations	Cognitive domain – Comprehension	Must know	Khows how/ Shows how	1) Practical classes 2) presentation of videos 3) Graphical Representation of Vocal system Class room reading / speaking	Oral / Written Assignment on Identifying the Places of articulation of the words in Ayurveda texts.	F&S	I	
Topic 2- संज्ञा **(10 marks)- Time:** 05 **Hrs (Lecture:-** 5 **hours Non lecture** 00 **hrs)**									
CO 2, CO 4, CO	2.1 Explain the terms related to संज्ञा in Sanskrit grammar	Cognitive domain- Comprehension	Desirable to know	Knows	Lecture with Power point presentation	Oral, Conduction of quiz	F&S	II	
CO 2, CO 4, CO 5	2.2 Identify the संज्ञा Explain the meaning of the संज्ञा	Cognitive domain- Comprehension	Must know	Khows how	Lecture with Power point presentation	Oral / written Very short answer Differentiate, identify, fill in the blanks etc	F&S	I	

						Preparation of MSQ (MCQ) Question-answer sessions			
Topic 3 **उपसर्ग: - उपसर्ग: क्रियायोगे (05** marks) Time: **05** Hrs (Lecture:- **02** hours Non lecture **03** hrs)									
CO 2, CO 4, CO 6	Identify the उपसर्ग: Explain the meaning of the words with उपसर्ग: Identify the difference in meaning according to the उपसर्ग:	Cognitive domain - Comprehension problem solving	Must know	Khows how	Lectures with Power point presentation. Problem Based Learning (PBL) Group Discussions	Oral & Written objective type very short answer compare differentiate etc, Assignments open book test	F&S	II	
Topic 4- अव्ययानि (05 **marks) Time:** 05 **Hrs (Lecture:-** 02 **hours Non lecture** 03 **hrs)**									
CO 2, CO 4, CO 6	4.1 Identify अव्ययानि	Cognitive domain - Comprehension	Must know	Knows	Lectures with Power point presentation. Group Discussions	Oral & Written. objective type very short answer - compare, differentiate Assignments on sentence construction, presentation by the students	F&S	I	
CO 2, CO 4, CO 6	4.2 Explain the meaning with reference to the context	Cognitive domain – Application	Must Know	Knows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short	F&S	II	

						answer / compare differentiate Assignments open book test			
CO 2, CO 4, CO 6	Construct the sentences using अव्ययानि	Cognitive domain - Synthesis	Must Know	Shows how	Lectures with Power point presentation. Group Discussions Conversation Sessions	Oral & Written Construct sentences with proper use of Avyayas. Use appropriate Avyayas. Very short answer Assignments on finding out the अव्ययानि used in the texts and explain their meaning with reference to the context. Open book test.	F&S	III	
Topic 5— कारकप्रकरणम् (15 **marks) Time:** 15 **Hrs (Lecture:-** 5 **hours Non lecture** 10 **hrs)**									
CO 3, CO 6	A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like **करणम् कारणम्** C) Construct sentences. D) Translate sentences from English to	Cognitive domain - Synthesis problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short answer / compare differentiate /	F&S	A)– I B) – II C) – III D) - III	

	Sanskrit & from Sanskrit to English.					meaning with reference to the context etc Assignments on identification of the karakas used in the Ayurveda basic principle terms like **करणम्** **कारणम्.**			
Topic 6- सन्धिः (15 **marks) Time:** 20 **Hrs (Lecture:-** 10 **hours Non lecture** 10 **hrs)**									
CO 2, CO 6	6.1 Identify सन्धिः Explain the meaning of the context by splitting. Formulate the joined words while writing the sentences	Cognitive domain - Application and problem solving	Must know	Knows how	Lectures with Power point presentation. Group Discussions Classes by the students Ashtang hrudaya with the **सन्धिः**	Oral & Written Objective type, very short answer – compare, differentiate etc. Assignments to find the **सन्धिः** in Ashtangahruda ya Quiz on सन्धिः	F&S	II	
CO 2, CO 6	6.2 Identify सन्धिः Explain the meaning of	Cognitive domain - Application and problem solving	Must know	Khows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short	F&S	II	

	the context by splitting. Formulate the joined words while writing the sentences				Classes by the students Ashtang hrudaya with the सन्धि:	answer compare and differentiate Assignments to find the **सन्धि:** in Ashtangahruda ya Quiz on सन्धि: Preparation of charts, mindmaps etc.			
CO 2, CO 6	6.3 Identify सन्धि: Explain the meaning of the context by splitting. Formulate the joined words while writing the sentences	Cognitive domain - Application and problem solving	Must know	Khows how	Lectures with Power point presentation. Group Discussions Classes by the students Ashtang hrudaya with the सन्धि:	Oral & Written objective type very short answer Assignments to find the **सन्धि:** in Ashtang hrudaya Quiz on सन्धि: Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	6.4 Identify सन्धि: Explain the meaning of the context by splitting.	Cognitive domain – Comprehens ion Application	Desirable to know	Knows	Lectures with Power point presentation.	Oral Preparation of charts, mindmaps etc.	F&S	II	

Topic 7- समास (15 **marks) Time:** 19 **Hrs. (Lecture:-** 09 **hours Non lecture** 10 **hrs)**									
CO 2	Identify समास: Discriminate between the सन्धि:and समास:	Cognitive domain - Comprehension	Must know	Knows	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer- compare differentiate Assignments to find the समास: in Ashtanga hrudaya Quiz on समास: Puzzles Word cloud Cross words etc.	F&S	II	
CO 2, CO 6	7.1 Identify समास: Explain the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम्while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer Assignments to find the समास: in Ashtangahrday a Quiz on समास: Puzzles Word cloud Cross words	F&S	II	

						etc. Preparation of charts, mindmaps etc.			
CO 2, CO 6	7.2 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer Assignments to find the समास: in Ashtangahrdaya Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.	F&S	II	
CO 2, CO 6	7.3 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम्while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Problem Based Learning(PBL) Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम्	Oral & Written objective type very short answer meaning with reference to the context etc. Assignments to find the समास: in Ashtangahrday	F&S	II	

						a Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.			
CO 2, CO 6	7.4 Identify समास: Explaining the meaning of the context by writing the विग्रहवाक्यम् Construct the समस्तपदम् while writing the sentences	Cognitive domain - Application and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions Flipped classroom Peer learning Classes by the students on the sutras in Ashtang hrudaya with the विग्रहवाक्यम् Problem Based Learning(PBL)	Oral & Written objective type very short answer Assignments to find the समास: in Ashtangahrday a Quiz on समास: Puzzles Word cloud Cross words etc. Preparation of charts, mindmaps etc.	F&S	II	
Topic 8- शब्दरूपाणि (10 **marks) Time:** 16 **Hrs (Lecture:-** 2 **hours Non lecture** 14 **hrs)**									
CO 2, CO 3, CO 6	Identify & write the अन्तलिङ्गविभक्तिवचनानि of a noun. Construct sentences	Cognitive domain – Synthesis problem solving	Must know	Shows how	Lectures with Power point presentation. Recitation Peer learning	Oral & Written objective type very short answer	F&S	I	

					Group Discussions	Assignments to find out the अन्तलिङ्गविभक्तिवचनानि of nouns used in various text books and writing all forms of all विभक्ति. Quizzes Puzzles Word cloud Cross words etc.			
Topic 9- धातुरुपाणि (10 **marks) Time:** 10**Hrs. (Lecture:-** 5 **hours Non lecture** 05 **hrs)**									
CO 2, CO 6	9.1 Identify & write लकारपदपुरुषवचनानि of the roots. Interpret the meaning according to the लकार: Use for constructing sentences.	Cognitive domain - Synthesis and problem solving	Must know	Shows how	Lectures with Power point presentation. Recitation Group Discussions Peer learning	Oral & Written objective type very short answer Assignments to find out the verbs used in various text book in the syllabus and completing all the forms. Quizzes Word cloud etc.	F&S	I	
CO 2, CO 6	9.2 Identify & write लकारपदपुरुषवचनानि of the roots.	Cognitive domain- Comprehension problem	Nice to know	Knows	Lectures with Power point presentation. Group Discussions	Oral Assignments Quizzes Word cloud etc.	F&S	I	

	Interpret the meaning according to the लकार:	solving							
Topic -10 प्रत्ययाः (10 **Marks) Time:** 11 **Hrs (Lecture:-** 5 **hours Non lecture** 06 **hrs)**									
CO 2, CO 6	10.1 Identify the प्रत्यया: Interpret the meaning with reference to the context with the support of the प्रत्यया:	Cognitive domain - Comprehension and problem solving	Must know	Shows how	Lectures with Power point presentation. Group Discussions	Oral & Written objective type very short answer Assignments Quizzes	F&S	II	
CO 2, CO 6	10.2 Identify the प्रत्यया: Interpret the meaning with reference to the context with the support of the प्रत्यया: (परीक्षायाम् वाच्य प्रयोग: स्वरुपे पृष्टव्य: |)	Cognitive domain- Application and problem solving	Must to Know	Shows how	Lectures with Power point presentation. Group Discussions	Oral Assignments Quizzes	F&S	II	
Topic 11- विशेषण विशेष्य (05 **Marks) Time:** 05 **Hrs (Lecture:-**02 **hours Non lecture** 03 **hrs)**									
CO 2, CO 6	Identify and discriminate different types of Visheshanas. Effectively use visheshanas in sentences.	Cognitive domain - Application and problem solving	Must know	Knows how / Shows how	Lectures with Power point presentation. Flipped classroom	Oral & Written Quizzes Word cloud etc.	F&S	II	

Paper II Part A - Sanskrit Learning Objective									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the Students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/ Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- निरुक्ति/ **Paryaya padani (15 marks) Time: 18 Hrs.** Lecture:- **7** hours **(A-2, B-5)** Non lecture **13 (A- 4, B-4, C-5** hrs**)**									
CO 2, CO 5	Explain the meaning of the words and their synonyms with the help of their nirukti (निरुक्तिः) A) आयुः ,शरीर, मनः, अग्नि,: जलम्, वातः, पित्तम्, कफः B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र , इन्द्रियम् ,श्रोत्र, चक्षु , ,रसना, घ्राण C) धी, धृति, स्मृति ,बुद्धी , ,मति प्रज्ञा ,मूत्र ,पुरीषः, स्वेद, आत्मा, रोगः,निदानम् ,रोगि ,: भेषजचिकित्सा , आदि	Cognitive domain - comprehension	Must know	Knows how	Lectures with Power point presentation. Flipped classroom Peer learning Ayurveda Samhita Group Discussions	Oral & Written objective type very short answer compare differentiate meanings meaning with reference to the context etc Assignments Open book test	F & S	A- **I** B – **II** **C- III**	Samhita, Kriya Shariir, Rachana Shariir.
Topic 2- परिभाषापदानि (20 **marks) Time** 25 **Hrs (Lecture:- 10 (A-2, B-4, C- 4 hours) Non lecture 15 (A- 5, B-5, C-5 hrs)**									

CO 2, CO 5	Explain the meaning of the words and their synonyms with the help of their nirukti (निरुक्तिः) Describe the Paribhasapadas (परिभाषापदः) परिभाषापदानि – A) आयुर्वेदः, पञ्चमहाभूतानि, त्रिगुणम्, दोषा,: मलाः, दूष्यम्, सम्सर्गः, सन्निपातः B) द्रव्य ,गुण, कर्म ,सामान्य, विशेष, गुरु, लघु, प्रकृतिः, विकृतिः,चयः, प्रकोपः, प्रसरः, स्थानसम्श्रयः, दोषगतिः भेदः, रसः, वीर्यम्, विपाकः, कार्यकारणभावः **C**) स्रोतस् , कोष्ठः, आमम्, विरुद्धाह्रम्, विरुद्धाहारः, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्गः, अवस्थापाकः, वेगः ,शोधन ,शमन, लंघन , बृहण, अनुपान आदि	Cognitive domain – Comprehension Application	Must know	Knows how	Lectures with Power point presentation. Flipped classroom Peer learning Group Discussions	Oral & Written objective type very short answer write short notes Assignments from Ayurveda Samhita Open book test	F&S	A- **I** B – **II** **C- III**	Samhita, Kriya Shari r, Rachana Sharir.
Topic 3 - अन्वयलेखनम् (30 **marks) Time** 34 **Hrs (Lecture:-** 20 (**A-** 4**, B-** 8**, C-**8 **hours**) **Non lecture** 14 (**A-**4**, B-**5**, C-**5 **hrs)**									
CO 4, CO 6	Identify the subject object Adjective noun verb in a sentence.	Cognitive domain – Comprehension Application	Must know	Shows how	Self-directed learning Flipped classroom Classes by the students	Oral & Written Objective type Very short answer Anvaya writing	F&S	A - **I** B - **II** C- **III**	Samhita

	Write the पदच्छेदं विग्रहवाक्यम् अन्वय: वाच्यार्थं and भावार्थम् Of shlokas A) अष्टाङ्गहृदयम् सूत्रस्थानम् – अध्यायत: सर्वाणि सूत्राणि | १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् B) अष्टाङ्गहृदयम् सूत्रस्थानम् – अध्यायत: सर्वाणि सूत्राणि | दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् – shloka numbers - प्रथम: 1, 2 द्वितीय: 1, 7 तृतीय: 9 चतुर्थ: 2, 3 पञ्चम: 2, 3 षष्ठ: 1, 4, 7 सप्तम: 2, 5, 17 अष्टम: 13, 12 नवम: 12, 13 दशम: 1, 19 एकादश: 1, 2 द्वादश: 1, 6				Group Discussions	Short answer Assignments on writing पदच्छेदं विग्रहवाक्यम् अन्वय: वाच्यार्थं भावार्थम्			

	त्रयोदश: 1, 7, 8, 9 चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4								
Topic 4 - **पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय (1**5 marks) Time **07** Hrs (Lecture:- **03** hours Non lecture **04** hrs)									
CO 4, CO 6	Construct Sanskrit sentences and comprehend a passage. Convert active and passive voice sentences. १. क्षपणक कथा २. नकुलब्राह्मणी कथा ३. चक्रधर कथा ४.सिंहकारकब्राह्मणपुत्र कथा ५. मूर्खपण्डित कथा	Cognitive Domain-Synthesis Problem Solving	Must know	Shows how	Activity based learning Self-directed learning Flipped classroom Group Discussions	Oral & Written objective type very short answer write summery Assignments on finding out प्रत्यय: and क्रियापदानि Assignments of changing the voice. Assignments on translation	F&S	III	

PAPER II Part B Ayurved Itihas									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration

Topic 1- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8	Describe Etymological derivation (Vyutpatti), syntactical derivation (Niruktti) and definition of the word Itihasa.	Cognitive/ Knowledge(K)	Must know	Knows	Lecture & Group Discussion,	Written MCQ	F & S	I	
CO 8	Describe of knowledge of history, its significance and utility, means and method of Ayurveda history	Cognitive/ coprehension	Must know	Knows	Lecture & Group Discussion, Tutorial, Video clips	Written MCQ **Discussions or debate**	F	I	
CO 8 CO 9	Explain Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.)	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Tutorial, Charts, Edutainment.	Written MCQ	F & S	I	
Topic 2- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Explain different opinions of origin and lineage of Ayurveda available in Samhitas and Samudra manthana and origin of Dhanvantari.	Cognitive/K	Must know	Knows	Lecture, video & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Outline 2-3 references of Ayurveda in Veda, Upanishat and Puarana	Cognitive/K	Desirable to know	Knows	Lecture, charts & Group Discussion, SDL	Written MCQ, **Online search of Archiological sites for Ayurved. Presentation by Students,**	F	I	

CO 8	Describe Ayurveda as Upaveda of Atharvaveda	Cognitive/coprehention	Desirable to know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
Topic 3- Time (Lecture:- 2 hour, Non lecture 2 hours)									
CO 8 CO 9	Describe the Structure, Specialities, Time period of Charaka Samhita	Cognitive/K	Must know	Knows	Lecture, charts & Group Discussion Online Visit of Charakaranya, elared places.	Written MCQ **Chart prepration**	F & S	I	
CO 8 CO 9	Briefly explain contribution of Punarvasu Athreya, Agnivesha, Charaka, Drudhabala	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate the important Commentaries on Charaka Samhita and identify their authors.	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Activity on commentary, Compilation.	Written MCQ **Online samhitas, Commentory search**	F & S	I	
CO 8 CO 9	Explain the importance of Ayurveda Deepika, Jalpakalpataru.	Cognitive/K	Must know	Knows	Lecture & Group Discussion.	Written MCQ	F & S	I	
CO 8 CO 9	Justify Charakastu Chikitsite in view of Global medical history.	Cognitive/K	Must know	Knows	Lecture & Group Discussion,	Written MCQ **Debate Creativs writing**	F	I	Roganidana, Kayachikitsa
CO 8 CO 9	Describe the Structure, Specialities, Time period of Sushruta Samhita	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ Poster making	F & S	I	
CO 8 CO 9	Briefly explain contribution of Dhanvantari, Sushruta,	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	Salya tantra

	Nagarjuna, Chandrata								
CO 8 CO 9	Enumerate the important commentaries on Sushruta Samhita and identify their authors.	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ **Chart or collage**	F & S	I	
CO 8 CO 9	Explain the importance of Nibandha sangraha, Nyaya chandrika,	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Justify Shaareere Sushruta	Cognitive/comprehension	Must know	Knows	Lecture & Group Discussion	Written MCQ Debate/Discussions	F	I	Rachana Sharira, Kriya sharira
CO 8 CO 9	Describe the Contributions of Sushruta Samhita to the field of surgery.	Cognitive/ Comprehension	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	Shalya Tantra
CO 8 CO 9	Identify the acharyas of Atreya and Dhanvantari Sampradaya	Cognitive/K	Must know	Knows	Lecture & Group Discussion Quiz	Written MCQ	F & S	I	
CO 8 CO 9	Describe the Structure, Specialities, Time period of Ahtanga sangraha and Ashtang hridaya.	Cognitive/K	Must know	Knows	Lecture & Group Discussion Video Clips	Written MCQ Chart or collage of events	F & S	I	
CO 8 CO 9	Briefly explain contributions of Vruddha and Laghuvagbhata	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Enumerate commentaries on Ahtanga sangraha and Ashtang hridaya and explain importance of Indu, Hemadri and Arunadatta commentary.	Cognitive/K	Must know	Knows	Lecture & Group Discussion	Written MCQ Quiz	F & S	I	
CO 8	Justify Sutrasthane tu	Cognitiv	Must know	Knows	Lecture & Group	Written	F & S	I	

CO 9	vagbhata	e/K			Discussion	MCQ			
CO 8 CO 9	Enumerate the salient features of Bhela Samhita	Cognitive/k	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ	F	I	
CO 8 CO 9	Enumerate the salient features of Hareeta Samhita	Cognitive/k	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ	F & S	I	
CO 8 CO 9	Describe the Structure, Specialties, Time period of Kashyapa Samhita	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ Chart or collage of Events	F & S	I	
CO 8 CO 9	Briefly explain contribution of Kashyapa, Jeevaka, Vatsya.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
CO 8 CO 9	Identify contribution of Kashyapa Samhita to the field of Pediatrics.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	I	
Topic 4- Time (Lecture:- 1 hour, Non lecture 3 hours)									
CO 8 CO 9	Describe Structure, Contributions and importance of Madhava Nidana.	Cognitive/k	Must know	Knows	Lecture & Group Discussion, Library Session for handing of books.	Written MCQ Library Searching **online availabe Samhitas. Samhita mobile applications**	F & S	II	
CO 8 CO 9	Outline the importance of Madhavakara, Vijayarakshita, Shrikanthadatta and Justify nidane madhava shreshtha.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	Roganidana
CO 8	Describe Structure,	Cognitiv	Must know	Knows	Lecture & Group	Written	F & S	II	

CO 9	Contributions and importance of Sharngadhara Samhita.	e/k			Discussion	MCQ			
CO 8 CO 9	Briefly explain contribution of Sharngadhara, Adhamalla, Kashiram.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ	F & S	II	
CO 8 CO 9	Explain about Bhavamishra and Enumerate the salient features of Bhavaprakasha.	Cognitive/k	Must know	Knows	Lecture & Group Discussion,	Written MCQ	F & S	II	
Topic 5- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Enlist origin and period of different systems of medicine in the world.	Cognitive/k	Must know	Knows	Lecture & Group Discussion	Written MCQ Assignments	F & S	II	
Topic 6- Time (Lecture:- 0 hour, Non lecture 1 hours)									
CO 8 CO 9	Explain in brief about Ashwayurveda, Gajayuyrveda, Gavayurveda and Vrukshayurveda.	Cognitive/k	Must know	Knows	Lecture (Included in Transitional Curriculum)& Group Discussion	Written MCQ Serach of Use of Ayurved plats in different cattle food. Poster making	F & S	II	
Topic 7- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Describe the Status of Ayurveda during the period of Ashoka, Mughal and British rule.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, SDL	Written MCQ Collect the photos online and make a documentor	F & S	II	

						y in your voice.			
Topic 8- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Name the Contributions of Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, Tutorial, Self directed learning (SDL)	Written MCQ, Quiz, Match the pair Edutainment Poster making, Video clip making, Compilation,	F & S	III	
Topic 9- Time (Lecture:- 1 hour, Non lecture 2 hours)									
CO 8 CO 9	Discuss Globalization of Ayurveda – Expansion of Ayurveda in Misra (Egypt), Sri Lanka, Nepal other nations.	Cognitive/K	Desirable to know	Knows	Lecture & Tutorial, Video Edutainment	Written MCQ Collect data and make video clip with your own narration.	F & S	III	
Topic 10- Time (Lecture:- 1 hour, Non lecture 2 hours)									

CO 8 CO 9	Enumerate the various Committees and 2-3 recommendations	Cognitive	Must know	Knows	Lecture	Written MCQ	F & S	III	
CO 8 CO 9	Explain activities of Department of AYUSH, CCIM/ NCISM, CCRAS	Cognitive/K	Must know	Knows	Lecture & Group Discussion, Tutorial	Written MCQ Visit to Website of the Departments and discussion	F & S	III	
CO 8 CO 9	Identify the institutes All India Institute of Ayurved, New Delhi, (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi.	Cognitive/K	Desirable to know	Knows	Lecture & Group Discussion, Video	Written MCQ, Visit to web sites of colleges and Discussions.	F & S	III	

List of Practicals Hours: 180 Hrs

SN	Name of Practical Sanskrit	Term	Hours
P1	Use of Dictionaries and Shabdakoshas अमरकोश:, वनौषधिवर्ग:, शब्दकल्पद्रुम:, वाचस्पत्यम्	I	15
P2	Translation from Sanskrit to desirable language.	II	15
P3	Translation from desirable language to Sanskrit.	II	15
P4	सम्भाषण भाषा पठनम् Spoken Sanskrit and Communication Skills	III	15
P5	All activity based practicals from above table are enlisted. (In table 2 and Table 3) They are as follows: 1. Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc. 2. Graphical Representation of Vocal system 3. Reading / Pronounciation 4. Preparing different Shabdarupani and recitation 5. Preparing different Kriyapadani. 6. Practicals on Karakani. 7. Practicals on Pratyayas 8. Practicals on Sandhis 9. Practicals on Samasa 10. Practicals on Upasargas. 11. Practicals on Avyayas 12. Practicals on Visheshan – Visheshya 13. Practicals on Anvay lekhana 14. Practicals on Nirukti 15. Practicals on Paribhasha 16. Practicals on Panchatantra	 I I I I/II I I/II II II II II II II I/II/III II/III I/II/II III	120 hours

Table 4: Learning objectives (Practical) of AyUG- SN & AI

Sanskrit Practical									
A4 Course outcome	**B4 Learning Objective (At the end of the session, the Students should be able to)**	**C4 Domain/sub**	**D4 Must to know/ desirable to know/Nice to know**	**E4 Level Does/ Shows how/ Knows how/ Know**	**F4 T-L method**	**G4 Assessment**	**H4 Formative /summative**	**I4 Term**	**J4 Integration**
Practical 1- अमरकोश: -वनौषधिवर्ग:, शब्दकल्पद्रुम:, वाचस्पत्यम्, Dictionaries **Time: 15 Hrs** (Practical/ Clinical **15** hours)									
CO 5	Refer the dictionaries. Refer the Books on synonyms	Cognitive domain - comprehension	Must to know	knows	Demonstration for identifying the meaning of the words with the support of the shabdakoshas like Amarkosha, Shabda kalpadruma, vachaspatyam etc. Record writing	Oral	F & S	I	
CO 5, 6	Improve the vocabulary. Use in reading and writing.	Cognitive domain - comprehension	Desirable know	knows	Group Discussions Record writing	Oral Recitation Competitions Aksharashloka competitions etc.	F & S	II	
Practical 2 - Translation from Sanskrit to desirable language. **Time: 15 Hrs.** (Practical/ Clinical **15** hrs)									
CO 3, 4, 5, 6	Translate from Sanskrit to	Cognitive domain -	Must to know	Shows how	Demonstration Group Activity	Oral Written	F & S	II	

	desirable language.	comprehensi on, synthesis.			Record writing				
Practical 3 - Translation from desirable language to Sanskrit. **Time: 15 Hrs.** (Practical/ Clinical **15** hrs)									
CO 3, 4, 5, 6	Translate from desirable language to Sanskrit.	Cognitive domain - comprehensi on, synthesis.	Must to know	Shows how	Demonstration Group Activity Record writing	Oral Written	F & S	II	
Practical 4- सम्भाषण भाषा पठनम् **Spoken Sanskrit Time: 15 Hrs** (Practical/ Clinical **15** hrs)									
CO 6, 7	Apply Sanskrit grammar. Write a small paragraph or Script. Speak atleast 5 to 10 lines in Sanskrit fluently. Stage a skit.	Cognitive domain - comprehensi on. Psychomotor domain – articulation Psychomotor domain – articulation	Must to know	Shows how	Staging small skits. Script writing, elocution competitions. Games Conversation Peer learning Creating conversations Conversations in different situations by the students.	Oral	F & S	III	

P5 All activity based practicals from above table are enlisted. **(In table 2 and Table 3)** They are as follows: (NLH 120)

1. Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc.
2. Graphical Representation of Vocal system
3. Reading / Pronounciation
4. Preparing different Shabdarupani and recitation
5. Preparing different Kriyapadani.
6. Practicals on Karakani.
7. Practicals on Pratyayas

8. Practicals on Sandhis
9. Practicals on Samasa
10. Practicals on Upasargas.
11. Practicals on Avyayas
12. Practicals on Visheshan - Visheshya
13. Practicals on Anvay lekhana
14. Practicals on Nirukti
15. Practicals on Paribhasha
16. Practicals on Panchatantra

Table 5: Non Lecture Activities Course AyUG- SN & AI

List non lecture Teaching-Learning methods	No of Activities	Total
Sanskrit		
Presentation of videos	2	120
Graphical Representation of Vocal system	1	
Guided Reading,	5	
Peer learning	4	
PBL	36	
Quizes, puzzles, cross word, word cloud	13	
Group activities	37	
SDL	17	
Recitation	5	
Practical (Refer Table 4	60	60
Ayurved Itihas	20	20
		200

Topic wise details –

List non lecture Teaching-Learning methods	No of Activities
Presentation of videos about Maheshwar Sutra, Prayatna, Uccharana Sthanani etc.	2
Graphical Representation of Vocal system	1
Reading / Pronounciation (Guided Reading, Peer learning)	7
Preparing different Shabdarupani and recitation (PBL, Peer learning, Quizes, word cloud, crosswords, recitation etc.)	14
Preparing different Kriyapadani. (PBL, Group activities)	5
Practicals on Karakani. (PBL, Group Discussions)	10
Practicals on Pratyayas. (PBL, Group Discussions)	6
Practicals on Sandhis (PBL, Quizes, puzzles, Group activities)	10
Practicals on Samasa (PBL, Quizes, puzzles,)	10
Practicals on Upasargas. (PBL, group activities)	3
Practicals on Avyayas (PBL, group activities)	3
Practicals on Visheshan – Visheshya (PBL)	3
Practicals on Anvay lekhana (PBL, SDL, Group Discussions)	14
Practicals on Nirukti (PBL, SDL, Group Discussions)	13
Practicals on Panchatantra - Vachya of sentences, Writing sentences using appropriate Shabdarupani and Kriyapadani etc. (SDL, PBL, group activities)	4
Practicals on Paribhasha (PBL, SDL, Group Discussions)	15
	120

Ayurved Itihas-

List non lecture Teaching-Learning methods	No of Activities
Group Discussion,	10
Video clips	5
Online Search, Prroject	
Tutorial	
Quiz, Collage, Puzzle	5
	20

Table 6: Assessment Summary

6 A-Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-SN & AI	2	200	-	75*	10 (Set-FA)	15	100	300
*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa									

6 B - Scheme of Assessment (formative and Summative)

SR.NO.		PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
			First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	AyUG- SN & AI	First	3 PA & First TT	3 PA & Second TT	3 PA & UE
	PA: Periodical Assessment; TT: Term Test; UE: University Examinations				

6 C - Calculation Method for Internal assessment Marks (15 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total marks to 15 marks.							

6 D- Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	**Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.**
2.	Practical / Clinical Performance
3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project
11.	Specific Periodic Assessment **AyUG- SN & AI** **Sanskrit (3 PA / term)** Quiz, Puzzles, Word cloud, Cross words, Preparation of charts, mindmaps, Assignments, Open book test, Recitation. SanskritTopics 8 and 9 शब्दरूपाणि and धातुरुपाणि from paper 1 can be asked for recitation, word cloud, crossword etc. in all Terms Test and viva or any from above table. **Ayurved Itihas (3 PA/term)** Quiz, Puzzles, Word cloud, Cross words, Preparation of charts, mindmaps, Assignments, Open book test, Video Clips making. Any of Evaluation Methods for Periodical Assessment

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG SN & AI

PAPER-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100 Sanskrit

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ) All Sanskrit	20	1	20
Q 2	Short answer questions (SAQ) All Sanskrit	8	5	40
Q 3	Long answer questions (LAQ) All Sanskrit	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

AyUG SN & AI

PAPER-II

Time: 3 Hours

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100 = [Sanskrit, (LAQ and SAQ) 80 marks + Ayurved Itihas, (MCQ) 20 marks]

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ) Ayurved Itihas, (all 20)	20	1	20
Q 2	Short answer questions (SAQ) All Sanskrit	8	5	40
Q 3	Long answer questions (LAQ) All SaAnskrit	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I: Sanskrit			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1	संस्कृतवर्णानाम् परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तर प्रयत्नानि	**I**	**05**	**5**	**No**	**No**
2	संज्ञा- **2.1 -** संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धि **2.2 -** इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्,	**2.1 – I** **2.2 – II**	**05**	**5**	**No**	**No**
3.	उपसर्गाः- उपसर्गा :क्रियायोगे प्र, परा, अप, सम्, अनु, अव, निस्, निर्, दुस्, दुर्, वि, आङ्, नि, अपि, अधि, अति, सु, उत्, अभि, प्रति, परि, उप	**II**	**05**	**No**	Yes (1 que of 5 marks)	**No**
4.	अव्ययानि **4.1 -** च अपि खलु हि तु किल ननु वा च एव **4.2-** पुनः विना उच्चैः ऋते एवम् सह सार्धम् युगपत् यथा –तथा यावत्-तावत् इति यदा-तदा यदि-तर्हि साकम् न कुत्र कति कुतः किमर्थम् ,कियत् इह अत्र तत्र सर्वत्र अन्यत्र कुत्र एकत्र सदा अन्यथा एकथा A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि	I A II B III C	**5**	**No**	Yes (1 que of 5 marks)	**No**
5.	कारकप्रकरणम् तथा वाच्य प्रयोगः – कर्तृकारकम् , कर्मकारकम् , करणकारकम् , सम्प्रदानकारकम्, अपादान कारकम्, अधिकरणकारकम् , सम्बन्धः, उपपदविभक्तिः A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like **करणम् कारणम्** C) Construct sentences D) Translate sentences from English to Sanskrit & from Sanskrit to English.	I A II B III C, D	**15**	**5**	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

6.	सन्धि: **6.1 -** अच् सन्धि/:स्वरसन्धि: - यण् सन्धि- इको यणचि, गुण सन्धि=:आद्गुण: वृद्धिसन्धि-:वृद्धिरेचि, अयवायाव सन्धि: - एचोऽयवायव/:वान्तो यि प्रत्यये, लोप सन्धि-:लोप :शाकल्यस्य, पररूपसन्धि-:एङि पररूपम्, पूर्वरूपसन्धि- एङ: पदान्तादति, प्रकृतीभाव- सर्वत्र विभाषा गोः , प्लुत प्रगृह्य अचि नित्यम् | **6.2 -** हल्सन्धि: /व्यञ्जनसन्धि: - श्चुत्वसन्धि -:स्तो : श्चुना श्चु:, ष्टुत्वसन्धि -:ष्टुना ष्टु:, जश्त्व सन्धि-:झलां जशो/न्ते, अनुनासिकसन्धि-:यरोऽनुनासिकेऽनुनासिको वा/प्रत्यये भाषायां नित्यम्, परसवर्णसन्धि-:तोर्लि/:वा पदान्तस्य, चर्त्वसन्धि: खरि च, पूर्वसवर्णसन्धि-:झयोऽहोऽन्यतरस्याम्, छुत्वसन्धि: शश्छोऽटि /छत्वममीति वाच्यम्, अनुस्वारसन्धि -: मोऽनुस्वार:, तुगागमसन्धि-: शि तुक्/छे च/पदान्ताद्वा, रुत्वआदेशसन्धि-: नश्छव्यप्रशान् **6.3 -** विसर्गसन्धि: - रुत्वसन्धि-:ससजुषो रु:, उत्वसन्धि-: अतो रोरप्लुदादप्लुते/हशि च, रो रि, भो भागो अघो अपूर्वस्य योऽशि , रोऽसुपि , एतत्तदोः सुलोपोऽकोरनञ् समासे हलि, सोऽचि लोपे चेत् पादपूरणम् | **6.4.-** रुत्वप्रकरणसन्धि-: [सङ्क्षिप्य पाठनम् – Brief teaching] सम :सुटि, कानाम्रेडिते च, अत्रानुनासिको पूर्वस्य तु वा,अनुनासिकात्परोऽनुस्वार:, खरवसानयोर्विसर्जनीय:, विसर्जनीयस्य स:,सम्पुङ्कानां सो वक्तव्य: |	**II**	**15 (6.1- 5marks 6.2/6.4- 5marks 6.3 – 5marks)**	**No**	Yes (1 que of 5 marks)	Yes 10 (1 Que. of 10 marks)
7.	**समास** **7.1 -** अव्ययीभावसमास: - **7.1.1 -** अव्ययम् विभक्तिसमीपसमृद्धिव्यर्ध्यर्थाभावात्ययसम्प्रतिशब्दप्रादुर्भावप श्चायथानुपूर्व्ययौगपद्यसादृउश्यसम्पत्तिसाकल्यान्तवचनेषु | **7.1.2. -** प्रथमा निर्दिष्टम् उपसर्जनम्,/ उपसर्जनं पूर्वम् /नाव्ययीभावादतो/ म् त्वपञ्चम्या/: तृतीयासप्तम्योर् बहुलम्/अव्ययीभावे चाकाले | **7.2. -** तत्पुरुष समास: - द्वितीया श्रितातीतपतितगतात्यस्तप्राप्तापन्नै:, तृतीया तत्कृतार्थेन गुणवचनेन, कर्तृकरणे कृता बहुलम्, चतुर्थी तदर्थार्थ बलिहितसुखरक्षितै:, पञ्चमीभयेन, षष्ठी, सप्तमीशौण्डै ,: विशेषणं विशेष्येणबहुलम् ,उपमानानि सामान्यवचनै,: नञ् ,कर्मधारय ,द्विगु,: उपपद तत्पुरुष	**II**	**15 (7.1.1 &7.1.2 -- 5marks 7.1.3 – 5marks 7.14 & 7.15 – 5marks)**	**No**	Yes (1 que of 5 marks)	Yes 10 (1 Que. of 10 marks)

	7.3 - बहुव्रीहि समास - :अनेकमन्यपदार्थे **7.4 -** द्वन्त्वसमास - :चार्थे द्वन्द्व|:					
8.	शब्दरूपणि **8.1 -** पुल्लिङ्ग शब्दरूपाणि अकारान्त: - वात, वैद्य, रुग्ण, राम आदि इकारान्त: - अग्नि, मुनि आदि उकारान्त: - ऋतु, भानु गुरु आदि ऋकारान्त :- नृ, धातृ, पितृ आदि ओकारान्त: - गो आदि नकारान्त – श्लेश्मन्, रोगिन्, ज्ञानिन् आदि सकारान्त – चन्द्रमस् आदि तकारान्त – मरुत् आदि दकारान्त – सुहृद् आदि जकारान्त – भिषज्, आदि शकारान्त: - कीदृश्, एतादृश् आदि **8.2 -** स्त्रीलिङ्ग शब्दरूपाणि आकारान्त :- बला, कला, स्थिरा, माला आदि इकारान्त: - सम्प्राप्ति, प्रकृति, मति आदि ईकारान्त: - धमनी, नदी आदि उकारान्त: - रज्जु, धेनु आदि ऊकारान्त: - वर्षाभू, वधू आदि ऋकारान्त :- मातृ आदि चकारान्त: - वाच् आदि तकारान्त: - योषित्, सरित् आदि दकारान्तः – परिषद् आदि जकारान्त: - स्रज् आदि सकारान्त: - जलौकस्, सुमनस् आदि षकारान्तः – प्रावृष् आदि **8.3 –** नपुंसकलिङ्ग शब्दरूपाणि अकारान्त: - पित्त, वन आदि उकारान्त: - अश्रु, मधु आदि इकारान्त: - अक्षि, अस्थि, वारि, दधि आदि ऋकारान्त: - ज्ञातृ, धातृ आदि नकारान्त: - वर्त्मन्, दण्डिन् आदि सकारान्त: - स्रोतस्, मनस् आदि षकारन्तः – सर्पिष्, आयुष् आदि तकारान्त: - शकृत्, जगत् आदि **8.4-** सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम् आदि	**I**	**10**	**No**	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)
9.	धातुरुपाणि– **9.1 -** परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादि गण - भू सत्तायाम्, क्षि क्षये, गमॢ्गम् (गतौ, पा	**I**	**10**	**No**	Yes (1 que of 5 marks)	Yes (1 que of 5 marks)

	पाने, जीव्, पच्, त्यज् ,दृश्(पश्य) अदादि गण - अद् भक्षणे , हन् हिम्सागत्यो:, वा गतिगन्धनयो: पा रक्षणे ,अस्, श्वस्स्वप ,ृ ब्रू , जुहोत्यादि गण- धा धारणपोषणयो:, पृ - पलनपूरणयो:, हा त्यागे ,दा (दाञ्) दिवादि गण- दिवु क्रीडादौ, त्रसी उद्वेगे, पुष् पुष्टौ, कुप्, नश्, तुष्, स्निह्, जृ स्वादि गण- चिञ् चयने, शक्श्रु , तुदादि गण- तुद् व्यथने, कृष् विलेखने ,लिख् लेखने ,दिश्, कृन्त्, क्षिप्, स्पृश् रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे , भुजः तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ्- तर्पणे कान्ते च, ग्रह् उपादाने ज्ञः चुरादि गण- गण् संस्थाने, साध्, ताड्, धृ, कथ् वाक्यप्रबन्धे आत्मनेपदि - भ्वादि गण - वृतु वर्त्तने ,वृध्(वर्ध्), लभ्, सेव्, रुच् अदादि गण - शीङ् स्वप्नेब्रू , जुहोत्यादि गण- धा धारणपोषणयो ,:दा (दाञ्), दिवादि गण- जनी प्रादुर्भाव ,मन्, बुध्, पद्, विद् स्वादि गण- चिञ् चयने, तुदादि गण- तुद् व्यथने, कृष् विलेखने ,म्रि, विद्, मुच्, सिञ्च्, रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणेभुज ,ृ तनादि गण- तनु विस्तारे, कृञ् करणे क्र्यादि गण- प्रीञ्- तर्पणे कान्ते च, ग्रह् उपादानेज्ञ ,ः चुरादि गण- चुर् ,क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासु विद्यमानानां धतुरूपाणां परिचयीकरणम् अभिकाम्यम् **9.2 -** लृङ्ग , आशीर्लिङ्ग, लिट , लुङ्ग, लुड [सङ्क्षिप्य पाठनम्-Brief teaching] भ्वादि गण ,अदादि गण , जुहोत्यादि गण ,दिवादि गण ,स्वादि गण ,तुदादि गण ,रुधादि गण ,तनादि गण ,क्र्यादि गण ,चुरादि गण पूर्वोक्तधातुष्वेकस्य पञ्चलकारेषु रूपाणि दर्शयेत् | परं परीक्षायाम् न पृष्टव्यानि |					
10.	प्रत्ययाः **10.1 –** क्त - क्तवत् ,तव्यत् – अनीयर् ,शतृ – शानच् , ल्युट् - ण्वुल् ,क्त्वा - ल्यप् ,णिनि ,:क्तिन्, तुमुन् प्रत्ययाणाम् प्रयोगा: एव पृष्टव्या :| **10.2 -** भावे घञ् ,करणे घञ् ,भावे ष्यञ् ,कर्मणि ण्यत् , कर्त्तरि अच् अप् आयुर्वेदसंहितायां विद्यमानानां भावे/करणे/कर्त्तरि/ताच्छील्ये/ आदि प्रत्ययानां परिचय :करणीय :| परं परीक्षायाम् न	**I**	**10**	**3**	Yes (2 Que of 1 mark)	Yes (1 que of 5 marks)

	पृष्टव्या :| परीक्षायाम् वाच्य प्रयोग: स्वरुपे पृष्टव्य :|					
11	विशेषण विशेष्य	**II**	**05**	**2**	Yes (3 Que of 1 mark)	**No**

	Paper II **Sanskrit and Ayurved Itihas**			**D** Type of Questions "Yes" can be asked. "No" should not be asked.		
	Part A Sanskrit **List of Topics**	**B Term**	**C Marks**	**MCQ (1 Mark)**	**SAQ (5 Marks)**	**LAQ (10 Marks)**
1	निरुक्ति तथा पर्याय पदानि– A) आयु: ,शरीर, मन:, अग्नि,: जलम्, वात:, पित्तम्, कफ: B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र , इन्द्रियम्,श्रोत्र:, चक्षु:, रसना ,, घ्राण (C धी, धृति, स्मृति,बुद्धी, मति , प्रज्ञा ,मूत्र ,पुरीष:, स्वेद, आत्मा, रोग:,निदानम् ,रोगि ,:भेषजचिकित्सा , आदि	A -I B – II C- III	15	**No**	Yes (2 que of 5 marks)	Yes (1 que of 5 marks)
2	परिभाषापदानि – A) आयुर्वेद:, पञ्चमहाभूतानि, त्रिगुणम्, दोषा,: मला:, दूष्यम्, सम्सर्ग:, सन्निपात: B) द्रव्य,गुण , कर्म ,सामान्य, विशेष, गुरु, लघु, प्रकृति:, विकृति:,चय:, प्रकोप:, प्रसर:, स्थानसम्श्रय:, दोषगति: भेद:, रस:, वीर्यम्, विपाक:, कार्यकारणभाव: C) स्रोतस् , कोष्ठ:, आमम्, विरुद्धाह्नम्, विरुद्धाहार:, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्नवर्ग:, अवस्थापाक:, वेग: ,शोधन,शमन , लंघन , बृहण, अनुपान आदि	A - I B - II C- III	20	**No**	Yes (2 que of 5 marks)	Yes (1 Que. of 10 marks)
3.	अन्वयलेखनम् - A) अष्टाङ्गहृदयम् सूत्रस्थानम् –अध्यायत :सर्वाणि सूत्राणि १.आयुष्कामीयम् २.दिनचर्या ३.रोगानुत्पादनीयम् B) अष्टाङ्गहृदयम् सूत्रस्थानम् –अध्यायत :सर्वाणि सूत्राणि दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् – shloka numbers - प्रथम: 1, 2 द्वितीय: 1, 7 तृतीय: 9	A- I B - II C - III	30 (A B C 10 marks each)	**No**	Yes (3 que of 5 marks)	Yes (1 Que. of 10 marks and 1 Que of 5 marks as part A of Que. 3)

	चतुर्थ: 2, 3 पञ्चम: 2, 3 षष्ठ: 1, 4, 7 सप्तम: 2, 5, 17 अष्टम: 13, 12 नवम: 12, 13 दशम: 1, 19 एकादश: 1, 2 द्वादश: 1, 6 त्रयोदश: 1, 7, 8, 9 चतुर्दश: 2, 3, 4 पञ्चदश: 7, 10 षोडश: 5, 6 सप्तदश: 1, 4 अष्टादश: 1, 2, 3 एकोनविंशति: 2, 3, 4 विंशति: , 12, 3, 4					
4.	पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय	III	15	**No**	Yes (1 que of 5 marks)	Yes (1 que of 10 marks)
	Part B **Ayurved Itihas**					
	All Topics			**Yes**	**No**	**No**

6 G- Question paper blue print
Paper I – Sanskrit

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory Must know part 15 MCQ, Desirable to know 3 MCQ. Nice to Know 2 MCQ	1. Topic number 1 2. Topic number 1 3. Topic number 1 4. Topic number 1 5. Topic number 1 6. Topic number 2 7. Topic number 2 8. Topic number 2 9. Topic number 2 10. Topic number 2 11. Topic number 5 12. Topic number 5 13. Topic number 5 14. Topic number 5 15. Topic number 5

		16. Topic number 10 17. Topic number 10 18. Topic number 10 19. Topic number 11 20. Topic number 11
Q2	**Short answer Questions (SAQ)** 8 questions 5 marks for each que. All compulsory Must know part 7 questions, 1question on Desirable to know. No Questions on Nice to know.	Q1 Topic 6 अधोदत्तानां पदानां सन्धिं छित्वा वा योजयित्वा लिखत (5 Que x 1 marks each) Q2 Topic 7 अधोदत्तानां पदानां विग्रहवाक्यं समस्तपदं वा लिखत 5 Que x 1 mark each Q3 Topic 4 - अधोदत्तैः अव्ययपदैः रिक्तस्थानम् पूरयत। 5 Que x 1 mark each Q4 Topic 8 - शब्दरुपाणि लिखत (5 Que x 1 mark each) Q5 Topic 3 - उपसर्गाः (स्व)वाक्येषु योजयत 5 Que x 1 mark each Q6Topic 10 and 11- (स्व)वाक्येषु योजयत – 5 Que x 1 mark each Q7 Topic 9 - धातुरुपाणि लिखत 5 Que x 1 mark each Q8 Topic 5, 6 – अधोदत्ते श्लोके रेखाङ्गितानां पदानां कारकसंबंधं विशदीकृत्वा / निश्चयीकृत्वा तदनुसृत्य पदानां अर्थं लिखतु । (shlokas should be taken from the syllabus.) 5 Que x 1 mark each
Q3	**Long answer Questions (LAQ)** All compulsory 4 questions 10 marks for each que. All questions on must know. No Questions on Nice to know and Desirable to know.	Q1 Topic 8, 5 – उचितं शब्दरूपं विलिख्य वाक्ये योजयत। 5 Que. X 2 mark Q2 Topic 7 - अधोदत्तेषु श्लोकेषु रेखाङ्गितानां समस्तपदानां विग्रहवाक्यं समस्तपदम् वा समासनाम्ना सह लिखत। (Underline 5 Samast padas or give 5 Vigrah vakyas from a 5 to 7 line passage **or** 2 to 3 shlokas from the syllabus.) 5 Que. X 2 marks Q3 Topic 6 - अधोदत्ते परिच्छेदे रेखाङ्गितानां सन्धिं छित्वा वा योजयित्वा सन्धि सूत्रम् च लिखत।(Underline 5 Sandhi padas or Sandhi Vigrahas from a 5 to 7 line passage **or** 2 to 3 shlokas from the syllabus.) 5 Que. X 2 marks Q4 Topic 5, 9, 10 - अ) अधोदत्तस्य धातोः तव्यत् तुमुन् ल्यप् क्तवत् शतृ/शानच् प्रत्ययरूपाणि लिखत। 5 Que. X 1 marks आ) वाच्य प्रयोगः । 5 Que. X 1 marks (Sentences should be taken from syllabus Panchatantra.)

AyUG SN & AI :
Paper II – Sanskrit and Ayurved Itihas

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	**Multiple choice Questions (MCQ)** **Ayurved Itihas** 20 Questions 1 mark each All compulsory Must know part 15 MCQ, Desirable to know 3 MCQ. Nice to Know 2 MCQ	All Questions From **Ayurved Itihas**.Paper II Part B 1. Topic number 1/2 2. Topic number 3/4 3. Topic number 5/6 /7 /8 4. Topic number 9/ 10 5. Topic number 1/2 6. Topic number 3/4 7. Topic number 5/6 /7 /8 8. Topic number 9/ 10 9. Topic number 1/2 10. Topic number 3/4 11. Topic number 5/6 /7 /8 12. Topic number 9/ 10 13. Topic number 1/2 14. Topic number 3/4 15. Topic number 5/6 /7 /8 16. Topic number 9/ 10 17. Topic number 1/2 18. Topic number 3/4 19. Topic number 5/6 /7 /8 20. Topic number 9/ 10
Q2	**Short answer Questions (SAQ)** **Sanskrit** All compulsory 8 questions 5 marks for each que. Must know part 7 questions, 1question on Desirable to know. No Questions on Nice to know.	1. Topic number 3 अधोदत्तस्य श्लोकस्य पदच्छेदं लिखित्वा रेखाङ्गितानां पदानां शब्दरुपाणि धातुरुपाणि वा लिखत | 2. Topic number 3 अधोदत्तस्य श्लोकस्य अन्वयम् अर्थम् च लिखत 3. Topic number 2/3 अधोदत्तस्य श्लोकस्य अन्वयम् अर्थम् च लिखत 4. Topic number 3/ 4 प्रयोगं विपरिणमयत | 5 Que x 1 markeach 5. Topic number 2 अधोदत्तानाम् टिप्पणिर्लिखत | 6. Topic number 1 शब्दस्य निरुक्तिं तथा पर्यायवचनानि च लिखत | 7. Topic number 3/4 संस्कृत भाषायां अनुवदत | 8. Topic number 3/4 मातृभाषायां अनुवदत |
Q3	**Long answer Questions (LAQ)** **Sanskrit** All compulsory 4 questions 10 marks for each que.	1. Topic 4 अधोदत्तकथाया: साराम्शं सम्स्कृत भाषायाम् लिखत | or Comprehension. 2. Topic 2 अधोदत्तानाम् टिप्पणिर्लिखत | 2x5 (5 marks for each) 3. Topic 1, 3 A) प्रश्नानाम् पूर्णवाक्येन उत्तराणि लिखत | 5 Que.X 1 Mark for each B) निरुक्तिं तथा पर्यायवचनानि च लिखत || 5 Que. X 1 mark for each

	All questions on must know. No Questions on Nice to know and Desirable to know.	4. Topic 3 अधोदत्तस्य श्लोकस्य पदच्छेदं विग्रहवाक्यम् अन्वय: वाक्यार्थं शास्त्रार्थं च लिखत | 5 Que. X 2 marks

6 H - Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10 + IA 15) Marks

SN		Heads	Marks
A	**VIVA (75)**		
	1	Reading (structured approach)	**10**
	2	Shabdarupani and Karakani	**10**
	3	Sandhi and Padachcheda, Dhaturupani	**10**
	4	Samas	**5**
	5	Paribhasha, Nirukti	**5**
	6	Anvay	**10**
	7	Constructing sentences and conversation	**10**
	8	Compilation/ Record writing [Compilation/ Record writing book should contain 1. Anvay 2. Padachcheda 3. Samas 4. Shabdarupani 5. Dhaturupani 6. Bhavarth Of the 40 shlokas from Sanskrit Paper 2 topic numbers 3 A and B Ashtanga Hridayam and ten verses from Charak Samhita Sutrasthan 5 and 6 from Samhita Adhyayan - 1 subject.]	**10**
	9	Communication Skill	**5**
B	**Internal Asessment (15)**		**15**
C	**Electives (10)**		**10**
		Total Marks	**100**

7. References/ Resourses

Sanskrit

Books

1. संस्कृतपाठ्यपुस्तकम् प्रथमः तथा द्वितीयभागः- Sanskrit for Ayurveda part- I and Part –II Published by CCIM New Delhi
2. आयुर्वेदस्य भाषा-पञ्चभागाः- Ayurvedasya bhaSha part I to part –V samskrita samvardhana prathisthan mumbai
3. लघुसिद्धान्तकौमुदि: - वरदराज - Laghusiddhantakaumudi of bhattojidikshita
4. सिद्धन्तकौमुदि – भट्टोजिदीक्षितः siddhantakaumudi
5. वैद्यकीयसुभाषितसाहित्यम् - Vaidyakiyasubhashitasahityam, भास्कर गोविन्द घाणेकर, चौखम्बा प्रकाशन
6. पन्तन्त्रम् अपरीक्षितकारकम् - Pancatantra aparikshitakarakam 1 to 5 stories
7. शब्दकल्पद्रुमः - Sabdakalpadruma:
8. वाचस्पत्यम्- Vachaspatyam
9. अमरकोशः- Amarakosha
10. सिद्धारूपम् - Siddharupam
11. धातुपाठः- Dhatupatha
12. Sanskrit to English and English to Sanskrit Dictionary – Monier Williams
13. Sanskrit to Hindi and Hindi to Sanskrit Dictionary – Va. Shi. Apte
14. Sanskrit to Regional/ Desirable language dictionaries.
15. Ayurvediya Shabdakosha
16. Encyclopedic dictionary of Ayurveda – Dr. Kanjiv Lochan, Dr. P.S. Byadgi (Chaukhambha Publications)

Online Recourses:-

- Crossword Online
  https://crosswordlabs.com/
- Readymade Sanskrit Puzzles
  http://webapps.samskrutam.com/tools/CrosswordPuzzle.aspx
- Learning Sanskrit - Pronunciation 1

  https://www.sanskrit-trikashaivism.com/en/learning-sanskrit-pronunciation-1-1/456
- Pronunciation of all Sanskrit letters……

  sanskritdocuments.org
  http://sanskritdocuments.org/learning_tools/sarvanisutrani/allsutrani.htm
  sanskrit.jnu.ac.in
  http://www.taralabalu.org/panini/greetings.htm
- Vyakarana –

  https://sites.google.com/site/samskritavyakaranam/
- कोशाः / Dictionaries -
- Cologne Digital Sanskrit Lexicon:
  https://www.sanskritlibrary.org/cologne.html

https://www.sanskritdictionary.com/

www.monierwilliams.com

- Sanskrit Computational tools Samsadhani- https://sanskrit.uohyd.ac.in/scl/
- Learning https://www.learnsanskrit.cc/
- The Sanskrit Heritage Site https://sanskrit.inria.fr/
- Sanskrit Dictionary for Spoken Sanskrit www.learnsanskrit.cc https://spokensanskrit.org/index.php?mode=3&direct=es&script=hk&tran_input=name

Ayurved Itihas

Reference book

1. Upodghata of Kashyapasamhita (Paragraph of acceptance of Indian medicine) Rajguru Hem Raj Sharma
2. Upodghata of Rasa Yogasagar Vaidya Hariprapanna Sharma
3. Ayurveda Ka Itihas KaviraSuram Chand
4. Ayurveda Sutra Rajvaidya Ram Prasad Sharma
5. History of Indian Medicine (1-3 part) Dr. GirindrNath Mukhopadhyaya
6. A Short history of Aryan Medical Science Bhagwat Singh
7. History of Indian Medicine J. Jolly
8. Hindu Medicine Zimer
9. Classical Doctrine of Indian Medicine Filiyosa
10. Indian Medicine in the classical age AcharyaPriyavrata Sharma
11. Indian Medicine (Osteology) Dr. Harnley
12. Ancient Indian Medicine Dr. P. Kutumbia
13. Madhava Nidana and its Chief Commentaries (Chapters highlighting history) Dr. G.J. Mulenbelt
14. Ayurveda Ka BrihatItihasa Vaidya Atridev Vidyalankara
15. Ayurveda Ka VaigyanikaItihasa Acharya Priyavrata Sharma
16. Ayurveda Ka PramanikaItihasa Prof. Bhagwat Ram Gupta
17. History of Medicine in India Acharya Priyavrata Sharma
18. Vedome Ayurveda Vaidya Ram GopalS hastri
19. Vedomein Ayurveda Dr. Kapil Dev Dwivedi
20. Science and Philosophy of Indian Medicine Dr. K.N. Udupa
21. History of Indian Medicine from Pre-Mauryan to Kushana Period Dr. Jyotirmitra
22. An Appraisal of Ayurvedic Material in Buddhist literature Dr. Jyotirmitra
23. Mahayana Granthon mein nihita Ayurvediya Samagri Dr. RavindraNathTripathi
24. Jain Ayurveda Sahitya Ka Itihasa Dr. Rajendra Prakash Bhatnagar
25. Ayurveda- Prabhashaka Jainacharya Acharya Raj Kumar Jain
26. CharakaChintana Acharya Priyavrata Sharma
27. Vagbhata Vivechana Acharya Priyavrata Sharma
28. Atharvaveda and Ayurveda Dr. Karambelkara
29. Ayurvedic Medicine Past and Present Pt. Shiv Sharma
30. Ancient Scientist Dr. O.P. Jaggi
31. Luminaries of Indian Medicine Dr. K.R. Shrikanta Murthy
32. Ayurveda Ke Itihasa Ka Parichaya Dr. RavidduttaTripathi
33. Ayurveda Ke Pranacharya Ratnakara Shastri
34. Ayurveda Itihasa Parichaya Prof. Banwari Lal Gaur

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



PADARTHA VIJNANAM

(SUBJECT CODE- AyUG-PV)

FUNDAMENTAL PRINCIPLES OF AYURVEDA AND QUANTUM MECHANICS

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism
प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME
Padartha

NCISM

I professional Ayurvedacharya (BAMS)

Subject Code: AyUG-PV

Padartha Vijnanam

FUNDAMENTAL PRINCIPLES OF AYURVEDA AND QUANTUM MECHANICS

Total number of Teaching hours: 230			
Lecture hours (LH) - Theory		**90 Hours**	**90 Hours (LH)**
Paper I	45 Hours		
Paper II	45 Hours		
Non-Lecture hours (NLH) – Theory		**140 Hours**	**140 Hours (NLH)**
Paper I	70 Hours		
Paper II	70 Hours		
Non-Lecture hours (NLH) - Practical		**Hours**	

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100**	**100**	**60**	**10 (Set-FB)**	**30**
Paper II	**100**				
Sub-Total	**200**	**200**			
Total marks	**400**				

PREFACE

All Medical sciences whether ancient or modern, needs frequent updating. Acharya Vagbhata stresses upon reform of Ayurveda according to the present time (yuganurupasandarbha). The syllabus of Ayurveda also needs reformation for effective dissemination of principles of Ayurveda which is strongly based on Padartavijnanam. Acharya Vagbhata says one who seeks long life should respect Ayurveda by four strategies that are knowedge (Adhiti), comprehension(Bodha)skill(Acharana) and Attitude(pracharana).These teaching methodologies are evolved from the ancient upanishadic way of teaching(Adhyapanavidhi).The new principles of teaching strategies of blooms taxonomy correlate with the ancient way of teaching and the syllabus of Padarthavijnanam has been revamped according to the need of hour.

Padartha Vijnanam is a unique and mandatory subject needed for learning the stream of Ayurveda. It is the combination of science and philosophy. One can say that the science and philosophy are the two sides of the same coin. The search behind "existence of world/self" when progresses outward it travels the path of science and when this search is inwards it becomes philosophy. Thus, Padartha Vijnanam is an essential base of Ayurveda education. When the foundation becomes strong building also becomes strong.

Padartha Vijnanam not only provides the platform to understand Ayurveda better but it also helps the students to appreciate the moral values beneficiating them in developing the personality. As mentioned in graduate attributes this subject helps the student to become eloquent communicator and self-directed learner who constantly endeavors to advance knowledge and skills to improve healthcare and social well-being.

This syllabus reform of Padartha Vijnanam has taken care of adopting the modern teaching-learning methodology well-merging with the ancient one. This will definitely enhance the understanding of the subject in a better way.

Introduction of practicals is the zest for the subject. As we all know- "I hear, and I forget. I see and I remember. I do, and I understand". The teaching learning process must be joyful along with lecture methods like group discussions, debate, roleplay and PBL. They are also mentioned and the flexibility is kept. Here in this syllabus, the activity book is introduced to induce activity-based learning. This will definitely create the interest in the subject. There are some self-learning activities also which will induce the thirst for the knowledge in the student. This will help the student to understand theoretical concepts in a lucid way and also provides hands on experience

Index

Course Code and Name of Course 5
Table 1- Course learning outcomes and matched PO. 5
Table 2 : Contents of Course AyUG-PV 6
Paper I 6
Paper II 8
Table 3: Learning objectives (Theory) of Course AyUG-PV 10
Paper I 10
Paper II 27
List of Practicals 41
Table 4: Learning objectives (Practical) of AyUG-PV 46
Table 5: Non Lecture Activities Course AyUG-PV 58
Table 6: Assessment Summary AyUG-PV 58
6 A - Number of Papers and Marks Distribution 58
6 B - Scheme of Assessment (formative and Summative) 58
6 C - Calculation Method for Internal assessment Marks (30 Marks) 59
6 D -Evaluation Methods for Periodical Assessment 59
6 E- Paper Layout 60
Paper-I 60
Paper-II 60
6 F- Disribution of Theory Exam 61
Paper I 61
Paper II 61
6 G- Question paper blue print 62
Paper I – 62
Paper II 63
6 H Distribution of Practical Exam 64
7. References /Resourses 65

Course Code and Name of Course

	Course code	Name of Course
	AyUG-PV	Padartha Vijnanam (Fundamental Principles of Ayurveda and Quantum Mechanics)

AyUG-PV Course

Table 1- Course learning outcomes and matched PO.

CO	**Course learning Outcomes** (CO) **AyUG-PV** At the end of the course AyUG-PV, the student should be able to-	**Course learning Outcome matched with program learning outcomes.**
CO 1	Illustrate the scope and utility of Ayurveda	PO1
CO 2	Explain Philosophical foundation of Ayurveda, Principles (Siddhantha) of Darshana along with their similarities and relevance in Ayurveda and contemporary sciences.	PO1, PO2, PO6
CO 3	Analyse and interpret Padartha (Prameya) in Darshana and Ayurveda. Recognize their applications in Ayurveda.	PO1, PO2, PO9
CO 4	Distinguish, analyse and apply concept of Pramana shastra (Epistemology) in Darshana and Ayurveda. Demonstrate their applications in Ayurveda.	PO1, PO2, PO9
CO 5	Analyse and apply concept of Karya Karana Bhava in Ayurveda.	PO1, PO2, PO9

Table 2 : Contents of Course AyUG-PV

Sr No	A2 List of Topics AyUG-PV Paper I	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours
1	Ayurveda Nirupana 1.1 Lakshana of Ayu, composition of Ayu. 1.2 Lakshana of Ayurveda. Swaroopa and Prayojana of Ayurveda 1.3 Lakshana and classification of Siddhanta. 1.4 Introduction to Basic Principles of Ayurveda and their significance.	I	25	5	6
2	Padartha and Darshana Nirupana 2.1 Padartha Lakshana, Enumeration and classification of Padartha, Bhava and Abhava Padartha, Padartha according to Acharya Charaka (Karana-Padartha). 2.2 Etymological derivation of the word “Darshana”. Classification and general introduction to 9 Schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya ,Yoga, Meemamsa and Vedanta darshana. 2.3 Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda). 2.4 Principles and examples in contemporary sciences which will enhance understanding concept of Padartha. 2.5 Relevance of Study of Darshana and Padartha Vignana in Ayurveda	I		10	14
3.	Dravya vijnaneeyam 3.1 Dravya: Lakshana, Classification and Enumeration 3.2 Panchabhuta: Various theories regarding the creation (theories of Taittiriyopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Sushruta), Lakshana and qualities of each Mahabhoota. 3.3 Kala: Etymological derivation, Lakshana , division / units and significance. 3.4 Dik: Lakshana ,division and significance. 3.5 Atma: Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (atmanah jnasya pravrittih). 3.6 Purusha: According to Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha. 3.7 Manas: Lakshana, Synonyms, Qualities, Objects, Functions, dual nature of mind (ubhayaatmakatvam), as a substratum of diseases,Influence of Panchabhoutika aahara and aushadha (penta-elemental diet)on manas. 3.8 Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively. 3.9 Tamas as the tenth Dravya. 3.10 Practical study/Application and Importance of each Kaarana dravya in Ayurveda. 3.11 Principles and examples in contemporary sciences	II	48	14	20

	which will enhance understanding concept of Kaarana dravya.				
4.	Guna vijnaneeyam 4.1 Etymological Derivation, Classification and Enumeration according to various Darshana and Charaka, 4.2 Lakshana and Classification of Sartha Guna, Gurvadiguna, Paradiguna, Adhyatmaguna (41 Guna) 4.3 Gunapradhanyata (Importance of Guna) 4.4 Practical / clinical application of each Guna in Ayurveda 4.5 Principles and examples in contemporary sciences which will enhance understanding concept of Guna.	**II**		**4**	**6**
5.	Karma vijnaneeyam 5.1 – Introduction of concept of Karma According to Darshanaand Ayurveda – Classification of Karma 5.3 - Practical application of karma 5.4 - Principles and examples in contemporary sciences which will enhance understanding concept	**II**		**2**	**4**
6.	Samanya vijnaneeyam 6.1 – Introduction of concept of Saamaanya According to Darshana and Ayurveda. – Classification of Saamaanya 6.3 - Practical application of saamaanya 6.4 - Principle and examples in contemporary sciences which will enhance understanding theconcept of Saamanya.	**III**	**27**	**3**	**6**
7.	Vishesha vijnaneeyam 7.1 – Introduction of concept of Vishesha according to Darshana and Ayurveda 7.2 - Classification of Vishesha 7.3 - Practical Application of vishesha 7.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Vishesha	**III**		**3**	**6**
8.	Samavaya vijnaneeyam 8.1 – Introduction of concept of Samavaaya According toDarshana and Ayurveda. 8.2 – Practical application of Samavaaya 8.3- Principles and examples in contemporary sciences which will enhanceunderstanding theconcept of Samavaya	**III**		**2**	**4**
9	Abhava vijnaneeyam 9.1 – Introduction of concept of Abhaava According to Darshana and Ayurveda. 9.2 – Classification of Abhaava. 9.3 – Practical application of Abhaava 9.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Abhava.	**III**		**2**	**4**

Paper II					
	A2 List of Topics – AyUG-PV	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
1	Pariksha 1.1. Definition, Significance, Necessity and Use of Pariksha. 1.2. Definition of Prama, Aprama, Prameya, Pramata, Pramana. 1.3. Significance and importance of Pramana, Enumeration of Pramana according to different schools of Philosophy. 1.4. Four types of methods for examination in Ayurveda (Chaturvidha-Parikshavidhi), Pramana in Ayurveda. 1.5. Subsudation of different Pramanas under three Pariksha. 1.6. Practical application of methods of examination (Parikshavidhi) in Nidan and Chikitsa.	I	26	6	12
2	**2. Aptopdesha Pariksha/Pramana** 2.1. Lakshana of Aptopadesha, Lakshana ofApta. 2.2. Lakshana of Shabda, and its types. 2.3. Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya.Shaktigrahahetu. 2.4. Vaakya: Characteristics, Vaakyarthajnanahetu- Aakanksha, Yogyata, Sannidhi. **2.5.** Importance of Aptopadesha in maintaining Health, Prevention of Diseases, Diagnostics, Therapeutics and Research.	**I**		6	10
3.	**3. Pratyaksha Pariksha/Pramana** 3.1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification. 3.2. Indriya-prapyakaritvam, six types ofSannikarsha. 3.3. Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya (*Panchabhautikatwa* of Indriya) and similarity in sources (*Tulyayonitva*) ofIndriya. 3.4. Trayodasha Karana, dominance ofAntahkarana. 3.5. Hindrances in direct perception (*pratyaksha-anupalabdhikaarana*), enhancement of direct perception (Pratyaksha) by various	**II**	42	8	14

	instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha. 3.6. Practical study/ application of Pratyaksha in Sharir, Nidan (Diagosis), Chikitsa(Treatment) and Anusandhan (Research).				
4.	**4. Anumanapariksha/Pramana** 4.1. Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana. 4.2. Characteristics and types of Vyapti. 4.3. Lakshana and types of Hetu, Description of Ahetu and Hetwabhasa. 4.4. Characteristics and significance of Tarka (logic). 4.5. Practical study/ application of Anumanapramana in Sharir, Nidan, Chikitsa and Anusandhan.	II		10	15
5.	**5. Yuktipariksha/Pramana** 5.1. Lakshana and description. 5.2. Importance in Ayurveda. 5.3. Practical study and utility in diagnostics, therapeutics and research.	III	32	2	2
6.	**6. UpamanaPramana** 6.1. Lakshana. **6.2.** Application in Sharir, diagnostics, therapeutics and research.	III		2	4
7.	**Karya- Karana Siddhanta** 7.1. Lakshana of Karya and Kaarana. Types of Kaarana. 7.2. Significance of Karya and Kaarana in Ayurveda. 7.3. Different opinions regarding the manifestation of Karya from Kaarana: Satkaryavada, Parinamavada, Vivartavada, Asatkaryavada, Arambhavada, Paramanuvada, Kshanabhanguravada, Pilupaka, Pitharpaka, Anekantavada, Swabhavavada, Swabhavoparamavada. Importance/ Utility of each of these in Ayurveda 7.4 Study of cause effect relationship, causality, causation in Contemporary sciences.	III		11	13

Table 3: Learning objectives (Theory) of Course AyUG-PV

Paper I									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- Ayurveda Nirupana Time (Lecture: - _5 hours Non lecture 6 hours)									
CO1	Describe the Nirukti (etymology) and Definition of Ayu	Cognitive/ Recall	Must Know	Knows	Lecture Group discussion	Written and Viva	F and S	I	
CO1	Describe the components of Ayu	Cognitive/ Recall	Must Know	Knows	Lecture Group Discussion Enquiry Based learning	Written and Viva	F and S	I	
CO1	Explain Synonyms of Ayu with their meaning and importance	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva	F and S	I	
CO1	Distinguish between 4 types Ayu namely Sukhayu, Dukhayu, Hitayu, Ahitayu	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Problem Based Learning	Written and Viva, Quiz	F and S	I	
CO1	Realises that the balance between hitayu	Affective	Must know	Knows	Group Discussion/	viva	F	I	

	and Sukhayu will offer better living				Debate				
CO1	Describe Lakshana of Ayurveda and Enlist Synonyms of Ayurveda	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva	Fand S	I	
CO1	Explain different Swarupa of Ayurveda and Discuss Ayurveda Prayojana	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/Problem Based Learning	Written and Viva Open Book Test	F and S	I	
CO1	Explain Trisutra of Ayurveda and discuss Nityatva (eternity) of Ayurveda	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Debate	Written and Viva	F and S	I	
CO1, CO 2	Define Siddhanta	Cognitive Recall	Must Know	Knows	Lecture Presentation Discussion	Written and Viva	F and S	I	
CO1, CO 2	Distinguish the types of Siddhanta	Cognitive Comprehension	Must Know	Knows	Lecture Group Discussion/ Enquiry Based Learning	Written and Viva, Puzzle	F and S	I	
CO1, CO 2	Elaborate the Basic Principles of Ayurveda like Lokapurusha Samya Siddhanta Panchamahabhoota Siddhanta Tridosha Siddhanta Samanya Vishesha Siddhanta Karya Karana Siddhant	Cognitive Comprehension	Must Know	Knows	Lecture/ Group Discussion /Problem Based Learning/ Flipped Classroom	Written and Viva, quiz PBA CBA	F and S	I	

CO1, CO 2	Justify the Application of Basic Principles in Ayurveda	Affective	Must know	Knows	Lecture Demonstration/ Group Discussion	Written and Viva	F and S	I	
CO1, CO 2	Recite the concern verses from Tarkasangraha and Charak Samhita	Cognitive Recall	Desirable to know	Kmows	Audio clips, classroom recitation	Viva, recitation competition	F and S	I	
Topic 2- Padartha and Darshana Nirupana **Time** (Lecture:- _10__ hours Non lecture __14_hours)									
CO1, CO 2	Classify padartha, differentiate bhava, abhava padartha and Appreciate Shat karana of Acharya Charaka.	Cognitive Recall	Must Know	Knows	Lecture/ Discussions PBL	Written and Viva, puzzle	F & S	I	
CO1, CO 2	Discuss similarity and dissimilarity of padartha	Cognitive Comprehension	Desirable to Know	Knows	Lecture/ Discussions/ Activity based learning	Written and Viva	F & S	I	
CO2	Explain nirukti and vyakhya (definition) of darshana	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Describe Origin of darshana and Explain Importance of darshana (prayojana)	Cognitive Comprehension	Must know	Knows how	Lecture / Group Discussion	Written and Viva, Quiz	F & S	I	
CO1, CO 2	Analyse terms viz - philosophy, metaphysics, aesthetics, epistemology, psychology in relation with darshana	Cognitive Comprehension	Nice to know	Knows	Lecture / Group Discussion/ Activity Based learning	Written and Viva	F & S	I	
CO2	Classify darshana and differentiate between asthika, nasthika, asthikanasthika	Cognitive Recall	Must Know	Knows	Lecture / Enquiry Based Learning	Written and Viva	F & S	I	

	darshana								
CO1, CO 2	Enumerate darshana relevant for Ayurveda study and mention the pioneers of each darshana	Cognitive Recall	Must Know	Knows	Lecture/ Role play/Group Discussion	Written and Viva, Puzzle	F & S	I	
CO1, CO 2	Outline the reason for study of darshana in Ayurveda and Comprehend Philosophical foundation of Ayurveda	Cognitive Comprehension	Must Know	Knows how	Lecture/ Problem Based Learning/ Group discussion/Tutorial	Written and Viva, Open Book Test	F & S	I	
CO2	Explain meaning of nyaya and synonyms of nyayadarshana	Cognitive Recall	Must Know	Knows	Lecture Group discussion	Written and Viva	F & S	I	
CO2	Enumerate nyayoktha 16 padarthas, 12 prameyas	Cognitive Recall	Desirable to Know	Knows	Lecture /Enquiry Based Learning	Written and Viva	F & S	I	
CO2	Recall the content of nyaya sutra	Cognitive Recall	Nice to know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Outline salient features of nyayadarshana viz- chaturvida pramana, pitharapaka, arambhavada.	Cognitive comprehension	Must Know	Knows	Lecture/ Group discussion / Activity Based Learning	Written and Viva , Quiz	F & S	I	
CO2	Explain meanings of vaisheshika and synonyms	Cognitive Recall	Must Know	Knows	Lecture/	Written and Viva	F & S	I	
CO2	Recall the content of vaisheshika sutra	Cognitive Recall	Nice to Know	Knows	Lecture	Written and Viva	F & S	I	

CO2	Identify salient features of vaisheshika darshana viz-shatpadartha, paramanuvada, peelupakavada	Cognitive comprehension	Must Know	Knows	Lecture group discussion/Activity based learning	Written and Viva, quiz, puzzle	F & S	I	
CO2	Explain the meaning of sankhya	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva		I	
CO2	Enumerate, define and categorise 25 tatvas	Cognitive Recall	Must Know	Knows	Lecture discussion	Written and Viva puzzle	F & S	I	
CO2	Recall the trividhadukha, triguna, satkaryavada	Cognitive Recall	Must Know	Knows	Lecture/ Inquiry based learning	Written and Viva	F & S	I	
CO2	Define yoga and explain ashtangayoga	Cognitive comprehension	Must Know	Knows	Lecture Group discussion/demonstration	Written and Viva, quiz	F & S	I	
CO2	Recall content of yoga sutra	Cognitive Recall	Nice to know	Knows	Lecture	Written and Viva	F & S	I	
CO2	Enumerate chittavrutti, panchaklesha, ashtasiddhi	Cognitive Recall	Must Know	Knows	Lecture Debate /Group Discussion	Written and Viva, quiz	F & S	I	
CO2	Recall different type of yoga	Cognitive Recall	Nice to know	Knows	Lecture Self-Directed learning/Activity based learning	Written and Viva, open book test	F & S	I	
CO1, CO 2	Outline the salient features of meemamsa darshana and Vedanta darshana Viz. karma siddhanta, atma, maya, vivartavada,	Cognitive comprehension	Must Know	Knows	Lecture Group Discussion/ Debate	Written and Viva, Quiz	F & S	I	

CO1, CO 2	Explain similarity between Nyaya, vaisheshika, Sankyha, yoga, meemamsa and Vedanta darshana with Ayurveda	Cognitive comprehension	Must Know	Knows how	Lecture discussion PBL/ Flip classroom	Written and Viva	F & S	I	
CO1, CO 2	Explain Charvaka, Jaina and Bouddha darshana and their influence in Ayurveda	Cognitive comprehension	Must Know	Knows	Lecture Group Discussion	Written and Viva	F & S	I	
CO1, CO 2	Demonstrate Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).	Cognitive Comprehension Affective	Must Know	Knows how/	Lecture/ Group Discussions PBL	Written and Viva	F & S	I	
CO 1 CO 2	Compare the the Srishtiutpatti krama by different darshanas with contemporary theories like- Big Bang, The multiverse, brane world, the hylographic universe, Simulation theory etc	Cognitive Comprehension	Nice to Know	Knows	Lecture with Videos, Group discussion/ self learning	Puzzle, viva	F	I	
CO 1	Respect ancient philosophy and Ayurveda	Affective	Must know	Know	Discussion	Discussion Debate	F	I	
CO1, CO 2	Enumerate padartha according to different schools of thought	Cognitive Recall	Desirable to Know	Knows	Lecture Group Discussion	Written and Viva, Puzzle	F & S	I	
CO1, CO 2	Find principles and examples in contemporary sciences	Cognitive/ Comprehension	Nice to know	knows	Lecture/ Discussions/ Self-learning,	-	F	I	

	which will enhance understanding concept of Padartha. For ex- matter and energy.								
CO1, CO 2	Analyse role of padartha in darshana and in Ayurveda and Demonstrate the role of Padarthavijnana in Ayurveda	Cognitive / Comprehension	Must Know	Knows how	Lecture/ Seminars /PBL	Written and Viva, Open Book Test	F & S	I	
CO2	Recite concern verses	Cognitive Recall	Desirable to know	kmows	Edutainment Audio clips, classroom recitation	Viva, recitation competition	F&S	I	
Topic-3 Dravya vijnaneeyam Time (Lecture:- __14_ hours Non lecture _20__hours)									
CO3	Explain Nirukti and Paribhasha (definition) of Dravya	Cognitive Recall	Must Know	Knows	Lecture	Written and Viva	F and S	II	
CO3	Classify Dravya and Differentiate between Karana and Karya dravya	Cognitive Recall	Must Know	Knows	Lecture Group Discussion/ Enquiry Based Learning	Written and Viva, Puzzle	F and S	II	
CO3	Enumerate Darvya as per different schools of thoughts	Cognitive Recall	Must Know	Knows	Lecture Group Discussion	Written and Viva, puzzle	F and S	II	
CO3, CO1	Value Practical application of study of Dravya in Ayurveda	Affective	Desirable to know	Knows how	Lecture Group Discussion	Written and Viva	F and S	II	
CO3	Explain the various theories (theories of Taittiriyopanishad, Nyaya-Vaisheshika,	Cognitive/ Comprehension	Must Know	Knows	Lecture Group Discussion /Activity Based	Written and Viva, Quiz	F and S	II	

	Sankhya-Yoga, Sankaracharya, Charaka and Sushruta) regarding creation of Panchamahabhoota				Learning				
CO3	Describe Prithvi Mahabhoota Explain qualities of Prithvi Mahabhoota	Cognitive / Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Aap Mahabhoota Explain qualities of Ap Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	DescribeTeja Mahabhoota Explain qualities of Teja Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Vayu Mahabhoota Explain qualities of Vayu Mahabhoota	Cognitive, comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3	Describe Aakash Mahabhoota. Explain qualities of Aakash Mahabhoota	Cognitive, Comprehension	Must Know	Knows	Lecture Seminar/ Group Discussion	Written and Viva	F and S	II	
CO3, CO1	Value Practical application of Panchamahabhoota in Ayurveda	Affective	Must know	Knows	Lecture Group Discussion, Demonstration	Written and Viva, Open Book Test	F and S	II	

CO2	Compare elementary particles/subatomic particles with Tanmatra/triguna.	Cognitive/ Recall	NK	Know	Video clips, discussions SDL	Quiz	F	II	
CO3, CO1	Define the term *Kala* from various *darshanas* and *Ayurveda.*	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Explain classification/types of *Kala*	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3, CO1	Find illustrations of kala explained in Ashtang Hridaya.	Cognitive/ Comprehension	Must know	Knows	Lecture /Activity Based Learning	Written and Viva	F & S	II	
CO3, CO2 CO1	Give examples of importance of Kala in Ayurveda and time as per contemporary sciences	Cognitive/ Recall	Must know	Knows how	Problem Based Learning/ Group Discussion	Written and Viva, Quiz	F & S	II	
CO3	Define *the term Dik*. Explain classification/ division of *Dik.*	Cognitive/ Recall	Must know	Knows	Lecture /Activity Based Learning	Written and Viva, puzzle	F & S	II	
CO3, CO1	Illustrate significance of *Dishas* in Ayurveda with examples.	Cognitive/ Comprehension	Must know	Knows how	Lecture /Seminar	Written and Viva	F & S	II	
CO3	Find illustrations of Dik explained in Ashtangahridaya.	Cognitive/ Comprehension	Must know	Knows how	Group Discussion	Written and Viva, Open book test	F & S	II	
CO3	Define the term Atma,	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Explain atma at different levels, seat, Gunas of Atma,	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	

CO1 CO3	Explain Atma Linga according to Charaka Samhita.	Cognitive/ comprehension	Must know	Knows	Lecture / Flipped Classroom	Written and Viva	F & S	II	
CO3	Describe the method / process of knowledge formation (*atmanah jnasya pravrittih*).	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Demonstration/	Written and Viva	F & S	II	
CO3	Describe Purusha as mentioned in Ayurveda	Cognitive/ Recall	Must know	Knows	Lecture	Written and Viva	F & S	II	
CO3	Differentiate Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shad-dhatvatmaka-purusha.	Cognitive/ Comprehension	Must know	Knows how	Lecture / Group discussions	Written and Viva	F & S	II	
CO3	Recognize and state significance of Atmavijnanam	Affective	Desirable to know	Knows	Group Discussions/ Problem Based Learning	viva	F	II	
CO3	Define term Manas, Enlist synonyms, Explain it's Guna. Karma, Vishay. Explain dual nature of mind. (*ubhayaatmakatvam*),	Cognitive/Recall and Comprehension	Must know	Knows	Lecture / Activity Based Learning/Debate	Written and Viva. Puzzle	F & S	II	
CO3	Explain influence of Panchabhoutika aahara and aushadha (penta-elemental diet) on manas	Cognitive/ Recall	Must know	Knows how	Lecture/ discussions/ PBL	Written and Viva. Open Book Test	F & S	II	

CO3	Recognizes the utility of Knowledge of Mana	Affective	Must Know	Knows	Case Based learning	viva	F &S	II	
CO3, CO1	Explain Concept of mind in other sciences.	Cognitive/ Recall	Nice to know	Knows	Discussions/ Videos	Written and Viva	F	II	
CO1	Explain Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.	Cognitive/ Comprehension	Must know	Knows how	Lecture / discussions/ C B L	Written and Viva	F & S	II	
CO3	Discuss the role of Tamas as the tenth Dravya	Cognitive/Comprehension	Desirable to know	Know	Lecture Edutainment Role Play	Written and Viva	F & S	II	
CO3	Realize Practical application of study of dravya in Ayurveda	Affective	Desirable to know	Know	Group Discussions/ Case Base Learning/ Demonstration.	Written and Viva, quiz	F & S	II	
CO3	Recite Dravya Granth of Tarka Sangrah& defn from Charak	Cognitive Recall	Desirable to know	kmows	Audio clips/ classroom recitation	Viva, Recitation Competetion	F&S		
CO3. CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Karana dravya. For ex- Quantum Physics	Cognitive/Comprehension	Nice to know	Know	Lecture/ Discussions/ Self-learning activity	Open book testh	F	II	
Topic -4 Guna vijnaneeyam Time (Lecture:-4 hours Non lecture 6 hours)									
CO3	Define Guna and classify Guna according to various Darshanas and Charaka Samhita	Cognitive Recall	Must know	knows how	Lecture /Demonstration	Written and Viva	F&S	II	

CO3	Explain the Lakshana of indriyartha Gunas with examples.	Cognitive Comprehension	Must know	Knows how	Lecture / Group Discussion	Written and Viva	F&S	II	
CO3	Discuss the Lakshana of Gurvadi Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written and Viva, puzzle	F&S	II	
CO3	Explain the Lakshana of Paradi Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written and Viva, Puzzle	F&S	II	
CO3	Describe the Lakshana of Adhyatma Guna with examples.	Cognitive Comprehension	Must know	Knows how	Lecture /Seminar/ Group Discussion	Written And Viva	F&S	II	
CO3	Appreciate the importance of Guna (Gunapradhanyata)	Affective	Must know	Knows	Discussion	Written Discussion viva	F&S	II	
CO3	Describe the practical application of Indriyartha Gunas in diagnosis of disease and Treatment	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Case based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Gurvadi Guna in diagnosis of disease and Treatment	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Case based learning	Written And Viva	F&S	II	
CO3	Describe the practical application of Paraadi Gunas.	Cognitive Comprehension	Must know	Knows how	Lecture / Demonstration/ Activity based learning	Written And Viva	F&S	II	

CO3	Describe the practical application of Adhyatma Guna .	Cognitive Comprehension	Must know	knows how	Lecture / Demonstration/ Problem Based Learning	Written And Viva	F&S	II	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation competition	II	
CO1 CO2	Discuss Principles and examples in contemporary sciences which will enhance understanding the concept of Guna.	Cognitive Comprehension	Nice to know	Knows	Lecture/ Discussions/ Self-learning activity	-	F	II	
Topic - 5. Karma vijnaneeyam Time (Lecture:- __2_ hours Non lecture _4__hours)									
CO3	Define *Karma* acco. to *various Darshana* and *Ayurveda*.	Cognitive Recall	Must know	Knows	Lecture	Written And Viva	F&S	II	
CO3	Compare the *Karma Lakshana* (characteristics) from *Charaka Samhita* and Darshana	Cognitive Comprehension	Must know	Knows	Lecture/ Group discussion/ Flipped Classroom	Written And Viva	F&S	II	
CO3	Explain the types of *Karma*	Cognitive Comprehension	Must know	Knows	Lecture and discussion, demonstration	Written And Viva	F&S	II	
CO3	Describe the process of production and destruction of *Laukika Karma* with one	Cognitive Comprehension	Desirable to know	Knows how	Lecture and demonstration	Written And Viva	F&S	II	

	example.								
CO3	Describe the *Adhyaatmika* karma and its causal relationship with health and disease.	Cognitive Comprehension	Must know	Knows how	Lecture and discussion	Written And Viva	F&S	II	
CO3	Enlist the other types of processes or pharmacological actions which came under the title of *Karma* in *Ayurveda*. Viz: *Panchakarma, Shastrakarma, Lekhana, Bruhana* etc.	Cognitive Recall	Must know	Knows how	Lecture and discussion/ Self Directed Learning	Written And Viva	S	II	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation/ Edutainment	viva	F&S Recitation competition	II	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Karma.	Cognitive Recall	Nice to know	Knows	Lecture/ Discussions/ Self-learning	-	F	II	
Topic - 6 . Samanya vijnaneeyam **Time** (Lecture:- _3__ hours Non lecture _6__hours)									
CO3	Explain the Samanya(According to *Ayurveda &Darshana*)	Cognitive Comprehension	Must know	Knows	Lecture	Written And Viva	F&S	III	
CO3	Distinguish the *Samanya* concept of *Ayurveda* from	Cognitive Comprehension	Must know	Knows	Lecture and discussion	Written And Viva	F&S	III	

	Darshana.								
CO3	Describe the *Anuvrutti Buddhi*	Cognitive Recall	Desirable to know	knows	Lecture and discussion	Written	F & S	III	
CO3	Explain the types of *Samanya* (Acc. To *Ayurveda* and *Darshana*)	Cognitive Recall	Must know	Knows	Lecture and discussion/ Flipped Classroom	Written And Viva	F & S	III	
CO3	Explain the importance of samanya in diagnosis and treatment	Cognitive Comprehension	Must know	Knows	Lecture and discussion/Case Based Learning	Written And Viva ,Quiz	S	III	
CO3	Identify the examples of *Dravya-guna-karma Samanya* with each *DOSHA-DHATU-MALA*	Cognitive Comprehension	Must know	Knows how	Lecture and Demonstration/ Group Discussion	Written And Viva , Open Book Test	S	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation competition		
CO1	Discuss principle and examples in contemporary sciences which will enhance understanding the concept of Samanya. For ex-system biology	Cognitive Comprehension	Nice to know	knows	Self -Directed learning	-	F	III	
Topic - 7 . Vishesh vijnaneeyam **Time** (Lecture:- __3_ hours Non lecture __6_hours)									
CO3	Explain Vishesha According to *Ayurveda* &*Darshana*	Cognitive Comprehension	Must know	Knows	Lecture and Group Discussion	Written And Viva	F&S	III	

CO3	Distinguish *Vishesha* concept of *Ayurveda* from *Darshana*.	Cognitive Comprehension	Must know	Knows	Lecture and Group Discussion	Written and Viva	F&S	III	
CO3	Describe the *Vyavrutti Buddhi*	Cognitive Recall	Desirable to know	knows	Lecture and discussion	Written	F & S	III	
CO3	Explain *Vishesha* in the context of *Mahabhoota Paramanu*	Cognitive Recall	Nice to know	knows	Lecture	Written	F & S	III	
CO3	Discuss the *Viruddha Vishesha* and *Aviruddha Vishesh aand other types of Vishesha*	Cognitive Comprehension	Must know	Knows how	Lecture and discussion, demonstration	Written And Viva	F&S	III	
CO3	Explain the statement "*Pravruttirubhayasyatu* "	Cognitive Comprehension	Must know	Knows how	Lecture, Problem Based Learning	Written Viva	F&S	III	
CO3	Provide different classifications of vishesha and their utility in Diagnosis and Treatment.	Cognitive recall	Must know	Knows how	Lecture/ Activity Based Learning	Written, Viva, Open Book Test	F&S	III	
CO3	Identify the examples of *Dravya-guna-karma Vishesha* with each *DOSHA-DHATU-MALA*	Cognitive Comprehension	Must know	Knows how	Lecture and demonstration/ Game Based Learning	Written And Viva Quiz	S	III	
CO1, CO2	Describe principles and examples in contemporary sciences which will enhance understanding the concept of Vishesha For ex- System Biology	Cognitive Comprehension	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	viva-	F	III	

CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation on competition	III	
Topic - 8. Samavay vijnaneeyam **Time** (Lecture:- __2_ hours Non lecture _4__hours)									
CO3	Explain Samavaya (Acc. To *Ayurveda* and *Darshana*)	Cognitive Recall	Must know	Knows	Lecture	Written And Viva	F&S	III	
CO3	Describe the eternal relation between ayutasiddhavritti	Cognitive Comprehension	Must know	Knows how	Lecture and demonstration	Written And Viva	F&S	III	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the concept of Samavaya	Cognitive Recall	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	-	F	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	Viva, Recitation competition	F&S		
Topic - 9. Abhav vijnaneeyam **Time** (Lecture:- __2_ hours Non lecture __4_hours)									
CO3	Define *Abhava*	Cognitive Recall	Must know	Knows	Lecture and discussion	Written And Viva	F&S	III	
CO3	Discuss the supportive and contradictory views for the acceptance of *Abhava* as a *Padartha*	Cognitive comprehension	Must know	Knows How	Lecture Group Discussion/ debate	Written And Viva	F&S	III	
CO3	Explain the view of *Ayurveda* about *Abhava*	Cognitive Recall	Must know	Knows	Lecture demonstration	Written And Viva	F&S	III	

CO3	Explain the four types of *Abhava*	Cognitive Recall	Must know	Knows	Lecture ,Activity Based Learning	Written And Viva , Puzzle	F&S	III	
CO3	Demonstrate the utility of the knowledge of *Abhava* in Ayurveda	Cognitive Comprehension	Must know	Knows how	Lecture, Group discussions Problem Based Learning	Written And Viva	F&S	III	
CO1 CO2	Discuss principles and examples in contemporary sciences which will enhance understanding the conceptof Abhava	Cognitive Recall	Nice to know	knows	Lecture/ Discussions/ Self-learning activity	-	F	III	
CO3	Recite the concern verses from TarkaSangrah and Charak Samhita	Cognitive Recall	Desirable to know	kmows	Audio clip/ classroom recitation	viva	F&S Recitation competetion		
Paper II									
Topic 1- (Pariksha) Time (Lecture:- 6 hours Non lecture 12 hours)									
CO4	Describe Pariksha	Cognitive/ Recall	Must know	Knows	Lecture/Group Discussion	Written And Viva	F&S	I	
CO4	Explain the necessity & significance of pariksha	Cognitive Comprehension	Must know	Knows how	Lecture/Problem Based Learning/Debate	Written And Viva	F&S	I	
CO4	Describe Buddhi and its classification	Cognitive / Recall	Must know	Knows	Lecture/Activity based learning	Written And Viva	F&S	I	
CO4	Describe Prama, Prameya, Pramata, Pramana and differentiate Prama and Aprama	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva, open book test	F&S	I	

CO4	Describe the Significance of Pramana	Cognitive / comprehension	Must know	Knows how	Problem based learning	Written And Viva	F&S	I	
CO4	Enumerate Pramana according to different schools of philosophy.	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva, puzzle	F&S	I	
CO4	Enumerate Pariksha as per Ayurveda.	Cognitive / Recall	Must know	Knows	Lecture/ Enquiry based learning	Written And Viva	F&S	I	
CO4	Describe the Pramana accepted by different schools of Philosophy with one example each.	Cognitive / Recall	Must know	Knows	Lecture/ group discussion	Written And Viva, quiz	F&S	I	
CO4	Describe 4 Pariksha explained by Ayurveda with one example each	Cognitive / Recall	Must know	Knows	Lecture/ activity based learning	Written And Viva, puzzle	F&S	I	
CO4	Justify the inclusion of Pramanas under three Pariksha	Cognitive / Comprehension	Must know	Knows how	Problem based learning and flipped classroom	Written And Viva	F&S	I	
CO4	Describe the practical application of Pariksha Vidhi in Diagnosis and Treatment.	Cognitive / Recall	Must know	Knows	Case based learning/ Group discussion	Written, open book test And Viva	F&S	I	
CO4	Establish that the Pramanas are tool to gain the knowledge	Affective	Must know	knows	Group discussion	Viva	F&S	I	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	

7. Topic 2- (Aptopdesha Pariksha/Pramana) Time (Lecture:- __6_ hours Non lecture _10__hours)I									
CO 4	Describe Apta and Aptopadesh	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	I	
CO 4	Describe the significance of Aptopadesha in Chikitsa	Cognitive / Recall	Must know	Knows	Case based learning/ Group discussion	Written And Viva	F&S	I	
CO 4	Define the term Shabda	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	I	
CO 4	Describe types of Shabda	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define the term Shaba artha bodhaka Vrutti	Cognitive / Recall	Must know	Knows	Lecture/ group discussion	Written And Viva	F&S	I	
CO 4	Enumerate Shabaartha bodhaka vrutti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva, quiz	F&S	I	
CO 4	Define Abhidha Vrutti with illustration	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Lakshana Vrutti with examples	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Enumerate the types of Lakshanavrutti and define each of them with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Vyanjana vrutti with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	I	
CO 4	Define Tatparyakhya vrutti with	Cognitive / Recall	Must know	Knows	Lecture/ Activity based	Written And Viva	F&S	I	

	example				learning				
CO 4	Define the term Pada with specification to Shakti and enumerate the types of Pada	Cognitive / Recall	Must know	Knows	enquiry based learning	Written And Viva	F&S	I	
CO 4	Enumerate Shaktigraha hetu	Cognitive / Recall	Must know	Knows	Lecture/ group discussion/ Problem based learning	Written And Viva, puzzle	F&S	I	
CO 4	Describe Shakti graha hetu	Cognitive / Recall	Must know	Knows	Lecture/ Tutorial/Problem based learning	Written And Viva	F&S	I	
CO 4	Enumerate Vaakyarthajnana hetu	Cognitive / Recall	Must know	Knows	Lecture/ group discussion/ Problem based learning	Written And Viva, quiz	F&S	I	
CO 4	Define Akanksha with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Define Yogyata with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	
CO 4	Define Sannidhi with example	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva	F&S	I	

CO 4	Describe importance of Aptopadesha in maintaining Health, Prevention of diseases, diagnostics, therapeutics and research.	Cognitive/ Comprehension	Must know	knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva, open book test	F&S	I	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	
Topic 3- Pratyaksha Pariksha/Pramana Time (Lecture:- __8_ hours Non lecture _14__hours)									
CO4	Define Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Tutorial/Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the types of Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe types of Pratyaksha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Describe Indriya Prapyakaritva Mechanism of sensory perception)	Cognitive / comprehension	Must know	Knows	Lecture/ Flip classroom/ Problem based learning	Written And Viva,	F&S	II	
CO4	Define Sannikarsha	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	

CO4	Describe the types of Sannikarsha	Cognitive / comprehension	Must know	Knows how	Lecture/ Problem based learning	Written And Viva, puzzle	F&S	II	
CO4	Define Indriya	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the types of Indriya	Cognitive / Recall	Must know	Knows	Lecture/ role play	Written And Viva	F&S	II	
CO4	Define Jnanendriya	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enlist the functions of Karmendriya	Cognitive / Recall	Must know	Knows	Problem based learning	Written And Viva	F&S	II	
CO4	Describe the function of Manas in relation to Jnanotpatti	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Justify the role of Manas as ubhayendriya in relation with Jnanotpatti and Karma.	Cognitive / Comprehension	Must know	Knows how	Problem based learning / Group discussion/Debate	Written And Viva, open book test	F&S	II	
CO4	Enumerate Panchapanchaka and describe its significance with respect to Pratyaksha Jnana	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	II	
CO4	Enumerate and describe briefly the various theories of Darshana and Ayurveda, which highlight the relationship of Indriya	Cognitive / Comprehension	Must know	Knows	Group discussion/ role play/debate	Written And Viva, open book test	F&S	II	

	and Panchamahabhuta.								
CO4	Justify the specificity of Indriya for perceiving specific Artha	Cognitive / Comprehension	Must know	Knows how	Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4	Enumerate Trayodasha Karana	Cognitive / Recall	Must know	Knows	Lecture/Tutorial / Activity based learning	Written And Viva, puzzle	F&S	II	
CO4	Enumerate Antahkarana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Enumerate the functions of Antahkarana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Illustrate the role Antahkarana in Jnanotpatti with example to highlight the significance	Cognitive / Comprehension	Must know	Knows how	Lecture/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Describe the factors which create hindrance for perception with an illustration (pratyaksha-anupalabdhikaarana)	Cognitive / Comprehension	Must know	Knows	Activity based learning/ Problem based learning / Group discussion	Written And Viva, puzzle	F&S	II	
CO4	Enumerate a few equipments or aids which help in enhancing the direct perception	Cognitive / Recall	Must know	Knows	demonstrations/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	II	
CO4	Justify the necessity of other pramana with textual references and	Cognitive / Application	Must know	Knows how	Lecture/ Activity based learning/	Written And Viva, open book	F&S	II	

	illustrations				Problem based learning / Group discussion	test			
CO4	Describe the practical application of Pratyaksha in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive / comprehension	Must know	Knows	Lecture/ case-based learning / Group discussion	Written And Viva	F&S	II	
CO4	Justify the role Pratyaksha (Observation and interpretation skills for generalization of results) in research	Cognitive / Application	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4	Realizes importance as well as limitation of Pratyaksha	Affective	Must know	Knows	Group discussion	Viva	F&S	II	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	II	
Topic 4 - Anumana pariksha/Pramana Time (Lecture:- _10__ hours Non lecture _15__hours)									
CO4	Describe Anumana	Cognitive / Recall	Must know	Knows	Lecture	Written And Viva	F&S	II	
CO4	Define the terms with an example (Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta)	Cognitive / Recall	Must know	Knows	Lecture/ enquiry based learning	Written And Viva, quiz	F&S	II	
CO4	Describe the types of anumana	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ group discussion	Written And Viva,	F&S	II	

CO4	Describe Pancha Avayava Vakya	Cognitive / Recall	Must know	Knows	Lecture/ gamification/ Problem based learning / Group discussion	Written And Viva	F&S	II	
CO4, CO2	Associate Contemporary method of carrying out research with Pancha Avayava Vakya	Cognitive / Comprehension	Desirable to know	Knows how	Self directed learning, / Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Define vyapti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of vyapti	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Define hetu	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	
CO4	Describe the types of hetu	Cognitive / Recall	Must know	Knows	group discussion	Written And Viva	F&S	II	
CO4	Enlist Sad-hetu Lakshana	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Define Hetwabhasa	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning	Written And Viva	F&S	II	
CO4	Explain the types of Hetwabhasa	Cognitive / Comprehension	Must know	Knows	Lecture/Tutorial group discussion	Written And Viva, puzzle, quiz	F&S	II	
CO4	Describe Ahetu	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	II	

CO4	Describe Tarkaas per Nyaya Sutra and Tarka Sangraha	Cognitive / Recall	Must know	Knows	Lecture Tutorial/ Problem based learning	Written And Viva, quiz	F&S	II	
CO4	Distinguish between Tarka as Aprama and tool in Anumana	Cognitive / Comprehension	Must know	Knows how	Enquiry based learning/ group discussion/debate	Written And Viva	F&S	II	
CO4	Justify the role of Tarka in Anumana	Cognitive / Comprehension	Must know	Knows how	Activity based learning/ Problem based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Demonstrate the practical applications of Anumana Pariksha (with few examples) in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive / Application	Must know	Knows how	Role play/ Game based learning / Group discussion	Written And Viva, open book test	F&S	II	
CO4	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competetion	F&S	I	
Topic 5 - Yukti pariksha/Pramana **Time** (Lecture:- _2__ hours Non lecture _2__hours									
CO4	Describe Yukti	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning/ Group discussion	Written And Viva	F&S	III	
CO4	Compare Yukti as an independent Pariksha and as a part of Anumana	Cognitive / Comprehension	Must know	Knows how	Lecture/ Activity based learning/ Problem based	Written And Viva, open book test	F&S	III	

					learning / Group discussion				
CO4	Describe the Importance of Yukti in Ayurveda	Cognitive / Recall	Must know	Knows how	Lecture / Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Describe the practical application of Yukti in Sharir, Nidan, Chikitsa and Anusandhan (research).	Cognitive Recall	Must know	Knows how	Lecture/ Activity based learning/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Recite the concern Verses from CharakSamhita	Cognitive Recall	Desirable to know	knows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
8. Topic 6 – Upamana Pramana Time (Lecture:- __2_ hours Non lecture _4__hours)									
CO4	Define Upamana..Enlist the types of Upaman	Cognitive / Recall	Must know	Knows	Lecture/ Activity based learning	Written And Viva	F&S	III	
CO4	Describe the Importance of Upamana in Ayurveda	Cognitive / Recall	Must know	Knows	Lecture/ Problem based learning / Group discussion	Written And Viva	F&S	III	
CO4	Describe the practical applications of Upamana in Sharir, Nidan, Chikitsa and Anusandhan.	Cognitive/ Comprehension	Must know	Knows	Lecture/ Game based learning/ Problem based learning / Group discussion	Written And Viva, quiz	F&S	III	
CO4	Recite the concern Verses from Tarkasangrah & Charak	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	

Topic 7 - Karya- Karana Siddhanta Time (Lecture:- _11__ hours Non lecture _13__hours)									
CO5 CO2	Define Karya and Karana. List types of Karana. Charakokta Dashvidha Parikshya Bhava.	Cognitive/ Recall	Must know	Knows	Lecture Tutorial	Written and Viva	F & S	III	
CO5	Explain Charakokta Dashvidha Parikshya Bhava.	Cognitive/Comprehension	Must know	Knows	Lecture/Problem Based learning	Written and Viva	F & S	III	
CO5 CO2	Describe the significance of Karya and Kaarana in Ayurveda	Cognitive/ Comprehension	Must know	Knows how	Lecture/problem based activity	Written and Viva	F & S	III	
CO5 CO2	Realises the utility of Charakokta Dashvidha Parikshya Bhav in understanding situations and taking decisions	Affective	Must know	Knows	Group discussion/ Role play/ Debate		F	III	
CO5 CO2	Distinguish different opinions regarding the manifestation of Karya from Karana	Cognitive / Application	Must know	Knows how	Edutainment Role play/ Debate group discussion/debate	Written and Viva, quiz	F & S	III	
CO5 CO2	Analyse Satkaryavada and relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5 CO2	Analyse Asatkaryavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	

CO5 CO2	Analyse Parinamavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Analyse Arambhavada & relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Analyse Paramanuvada and relate it with Ayurveda Siddhanta	Cognitive / Application	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Vivartavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Kshanabhangurvada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Swabhavavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
CO5 CO2	Explain Peelupakavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5	Explain Pitharapakavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion/debate	Written and Viva	F & S	III	
CO5	Explain Anekantavada and relate it with Ayurveda Siddhanta	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	
C05 CO2	Explain Swabhavoparamavada.	Cognitive/ Comprehension	Must know	Knows how	Lecture & Group Discussion	Written and Viva	F & S	III	

CO5 CO2	Recite the concern Verses from Tarkasangrah & CharakSamhita	Cognitive Recall	Desirable to know	kmows	Audio clips, classroom Recitation	Viva, Recitation competition	F&S	III	
CO5, CO2	Value cause and effect theory	Affective	Must know	Knows	Debate/Group Discussion	Viva	F	III	
CO 5, CO2	Analyse cause effect relationship, causality, causation in contemporary sciences	Cognitive / Comprehension	Nice to know	Knows	Self directed learning , Flipped classroom, Group Discussions.	-	-	III	

List of Practicals

Course AyUG-PV : Practical List

Marks: 100

Hours:- 45 (included in non Lecture hours)

SN	Name of Topic/ Name of Practical	Term	Activity / Practical
P1	Ayurved Nirupan	**I**	Ayurved Perception identification: Ask the meaning of Ayurveda to your parents, friends and family members (min 10) and write it, give your opinion on it. Introduction to communication skills. Conduct of survey.
P2	Darshana and Padartha	**I**	• Darshan concept development: Find and write names of different philosophies? • Discussions: meanings of philosophy, darshana, spirituality, religion. Are they same or different? Write in Activity Book.
P3	Hitayu/ Sukhayu lakshanas	I	• Identification of characters of Hitayu, & Sukhayu in Healthy individuals.
P4	Dravya	I	1. **Identification of Guna and Karma.** Make a list of 10 dravyas surrounding you and identify Guna and Karma in it. 2. **Panchbhautik nature identification:** Demonstrate the Panchamahabhuta in any five ahara dravya and five sharira dravya/ avayava with a neat labeled diagramme. (ex-cell, blood, vata, pitta, kapha etc). 3. **Determination of Directions:** Identify the directions in and enlist the content in each direction in your campus. 4. **Conceptualize Time :** Discussion and understanding of Kala as per Ayurved and contemporary sciences. 5. **Categorization** of Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv / Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons. 6. **Early Clinical Exposure(ECE):** Visit the OPD, find the diseases common for different age groups (balyavastha/ tarunyavastha/ vruddhavastha)

P5	Guna	II	**Identification:** **Sartha** Guna : Identify concept of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravya. **Application and demonstration** find the different therapies based on 5 Sartha Gunas. e.g. Gandha. Shabda, Sparsha. Observe /Experience/ Study / Read book or article **present** on (any one) Aromatherapy- Gandha Chikitsa. Music therapy/ Mamtra Chikitsa -Shabda guna. Sparsha- Touch therapy. **Gurvadi** Guna: Identify guna in any five ahara dravya : different vargas. in Sharir dravya: dosha, dhatu mala. **Comparison** Gurvadi gunas and corelate with concepts learned in Physics, Chemistry and Biology. Observation(**survey**) of the effects of Seasons on Gurvadi gunas in body, nature etc. **Paradi** Guna and their application in five examples. **Atma Guna identification:** Making or Framing their real life situations related to Atma Guna(sukha, dukkha etc)
P6	Karma	II	**Conceptualization** Karma, its application in branch of Ashtanga Ayurveda.(panchakrma/ Shastrakarma etc **Illustration**: Make a collage of pictures/ photos depicting five types of karma and their similarity with concepts learned in Physics, Chemistry etc.
P7	Pratyaksha Praman	II	**Observation**: Note down the factors from Prakruti analysis which you can

			understand through pratyaksh (like- colour, dry skin) **Identification**: Find few identification marks for identification of herbs/ minerals which need Pratyaksha. **ECE**: Pramans in examination of patient and Diagnosis of disease. Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc). Demonstrate with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video), Gandha. (5 examples)
P8	Pratyaksha Praman Limitations	II	**Observation**: Find out how one can overcome limitations of Pratyaksha by advances in equipment. (microscopre, telescope etc) **Justification** of use of various equipment in examination of patient and Diagnosis of disease. (X ray, USG etc)
P9	Anuman Praman	II	**Application in Real life situation** Write 3 examples of Vyapti (associations)in real life. Find and explain 5 examples of Anumana pramana as per types. Write 3 examples of panchavayava vakya. Correlate it with practicals that you have conducted. Examples of Hetvabhas.(Any three) Study use of inference in various sciences.
P10	Samanya Vishesh Siddhant	III	**Identification**: Visit vanaushadhi udyan of your college. Find samanyatva and visheshatva among plants. **Illustration** : Make a chart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas. **Application**: Make a list/ collection of seasonal vegetables and fruits which are

			Samanya/Vishesha with the dosha.(five examples)
P11	Samvay	III	**Conceptualization** Mention five real life examples of Nitya and anitya sambandha.
P12	Abhav	III	**Application**: Write five real life experiences of pragabhava, pradhwamsabhava, atyantabhava and anyonyabhav.
P13	Upman Praman	III	**Illustration** : Upamana in practical life or with your prior learning. (Examples of upamana from Ashtang Hridaya and Charak samhita)and prior learning (Examples in Physics, chemistry etc)
P14	Yukti Praman	III	**Conceptualization:** How various factors influence the process of the decision making? **Application** : Write 5 examples of Yukti in practical life or with your prior learning. **ECE:** Role of Yukti in Sharir, Nidan, Chikitsa and Anusandhan.
P15	Satkaryavad and other vadas	III	**Justification** : Parinama vada: Describe 3 real life or with your prior learning examples (Physics, Chemistry etc). Justification of Satkarya vada.: Describe 3 real life or with your prior learning examples. Swabhavoparama vada : Describe 3 real life or with your prior learning examples. Pakajotpatti siddhanta.: Write 3 examples of real life or with your prior learning. Justification of Arambhavada Describe 3 real life or with your prior learning examples
P16	Cause and effect theory	III	**Illustration:** Karya Karan Bhav: Write Samavayi, asamavayi and Nimitta Karana of a karya in real life examples (5 examples). Examples learned in Physics, Chemistry, Biology. **Search** Find out use of cause effect theory in other sciences. **Schematic representation** of cause effect in any examples.

			Application: Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya Remember and write theories of evolution you learned within and other than syllabus.
A1	**Other Activities in Journal.**	**I,** **II,** **III.**	1. **Oral presentation:** on allotted topic, PPT slides be made and Copy of slides be pasted in activity book 2. **Quiz:** Participation of all students in Quiz on some topic of Padartha vijnana. 3. **Recitation:** Important shloka of padartha vijnana recitation everyday or alternate days by students and written in diary. 4. Each student will do Pick and speak on topics of Padartha Vijnana. 5. e charts / animations etc.

Table 4: Learning objectives (Practical) of AyUG-PV

Practical									
A4 Course outcome	**B4 Learning Objective (At the end of the session, the Students should be able to)**	**C4 Domain/ sub**	**D4 Must to know/ desirable to know/ Nice to know**	**E4 Level Does/ Shows how/ Knows how/ Know**	**F4 T-L method**	**G4 Assessment**	**H4 Formative /summative**	**I4 Term**	**J4 Integration**
	Practical1-Ayurved Nirupan Time (practical- 2 hours)								
CO1	Define Ayurved	Cognitive Recall	MK	knows	discussion	Viva	**F & S**	**I**	
CO1	Conduct the survey to identify the perception about Ayurved in the society	Psychomotor	MK	Shows	Demonstration/ discussion	Viva	**F&S**	**I**	
	Practical2-Darshan and Padarth (Practical- 1hour)								
CO2	Discuss and compare the meanings of philosophy, darshana, spirituality, religion.	Cognitive / Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F &S	I	
CO2	Find and write names of different philosophies?	Cognitive/Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	I	
Practical - 3(hitayu/Sukhayu) Time (Practical/ Clinical 2 hours) **:**									

CO 1	Discuss characters of hitayu, &Sukhayu	Cognitive /Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	I	
CO 1	Identifies characters of hitayu, &Sukhayu in healthy individuals	Cognitive / Comprehension	MK	Knows How	Demo/Practical	Viva	F& S	I	
Practical 4- Dravya **Time** (Practical/ Clinical 6 hours)									
CO1,3	Define dravya, discuss nature of dravya	Cognitive Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	I	
CO1,3	Identify pentaelemental nature of Ahar Dravya Aushadh Dravya in given examples	Cognitive/ Comprehension	MK	Shows	Practical/Demonstration	Viva/ Practicals	F& S	I	
CO1,3	Identify the Guna and Karma in the given dravya	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Categorize the Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv /Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Identify the directions in and enlist the content in each direction in your campus.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	I	
CO1,3	Discus the concept of Kala as per Ayurved and	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/	Viva	F&S	I	

	contemporary sciences.				brainstorming				
CO1,3	find the diseases common for different age groups (balyavastha/ tarunyavastha/ vruddhavastha)	Cognitive/ Comprehension	MK	Knows how	Early Clinical Exposure.	Viva/ Practicals	F&S	I	
Practical - 5(Guna) Time (Practical/ Clinical 5 hours)									
CO 3	Discuss Guna,	Cognitive/ Recall	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO 3	Identify Gunas in given Ahar dravya.	Cognitive/ Comprehension	MK	Knows How	Demo/Practical	Viva/ Practicals	F&S	II	
CO 3	Identify Gunas in given Sharir dravya.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Identify the specification of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravy	Cognitive/ Comprehension	MK	Knows how	Demonstration of Dravyas like- kutki, gojihva, guduchi, yashtimadhu, sariva etc.	Viva/ Practicals	F&S	II	
CO 3	find the different therapies based on 5 Sartha Gunas. e.g.Gandha. Shabda, Sparsha.	Cognitive/ Comprehension	DK	knows	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	

CO 3	Observe and record the effects of Seasons on Gurvadi gunas in body and nature	Cognitive/ analysis	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Correlate Gurvadi gunas with concepts learned in Physics, Chemistry and Biology.	Cognitive/ comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
CO 3	Identify the paratva-aparatva in five examples	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Perform the Sanskar (toyasannikarsha/vasan/ Bhavana)	Psychomotor	MK	Shows	Practical/Demonstration	Viva/ Practicals	F&S	II	
CO 3	Frame the real life situations related to Atma Guna(sukha, dukkha etc)	Cognitive/ Comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
Practical -6 Karma Time (Practical/ Clinical 3 hours)									
CO 3	Discuss Karma	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO 3	Classify Karma in given	Cognitive/ Comprehe	MK	Knows how	Demonstration/ Practical	Viva/ Practicals	F&S	II	

	examples (panchakarma/Shastrakarma)	nsion							
CO 3	Illustrate five types of Karma in collage of pictures/ photos	Cognitive/ Comprehe nsion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	II	
CO 3	compare Karma with concepts learned in Physics, Chemistry etc.	Cognitive/ Comprehen sion	MK	Knows	Practical/Demon stration	Viva/ Practicals	F&S	II	
Practical – 7 Pratyaksha Praman Time (Practical/ Clinical 5 hours)									
CO4	Discuss Pratyaksha Praman	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO4	Find identification marks for identification of herbs/ minerals which need Pratyaksha.	Cognitive/ Comprehe nsion	MK	Knows how	Demonstration/ Practical	Viva/ Practicals	F&S	II	
CO4	Note down the factors from Prakruti analysis which need pratyaksh (like- colour, dry skin)	Cognitive/ Comprehe nsion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	II	
CO4	Discuss the use of pratyaksha in examination of patient and Diagnosis of disease.	Cognitive/ Comprehe nsion	MK	Knows how	ECE/ discussion	Viva/ Practicals	F&S	II	
CO4	identifies with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc),	Cognitive/ Comprehe nsion	MK	Knows how	Practical/Demon stration/ Shabd from recordings, (snigdha/	Viva/ Practicals	F&S	II	

	Rupa, Rasa(taste threshold video), Gandha.				ruksha etc) Sparsha by touching or instruments. (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video), Gandha.(intensity of Smell)				
CO4	Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc).	Cognitive/ Comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming	Viva/ Practicals	F&S	II	
Practical -8 Pratyaksha Badhakar Bhav Time (Practical/ Clinical 2 hours)									
CO4	Discuss Pratyaksha Badhakar Bhav (limitations of pratyaksha.)	Cognitive/recall	MK	Knows	Lecture	Viva	F&S	II	
CO4	Identify and classifies Pratyaksha badhakar Bhav in given examples.	Cognitive/ Comprehension	MK	Knows how	Demonstration/ Practical. Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	II	

CO4	Justify the use of various equipment in examination of patient and Diagnosis of disease.	Cognitive/ Comprehension	MK	Knows how	Demonstration/ discussion/ brainstorming/ Video Clips	Viva/ Practicals	F&S	II	
Practical -9 Anuman praman Time (Practical/ Clinical 5 hours)									
CO4	Discuss Anuman praman	Cognitive/ Recall	MK	Knows	Demonstration/ discussion/ brainstorming	Viva	F&S	II	
CO4	Identify and classify Anuman praman with type in given examples.	Cognitive/ Comprehension	MK	knows	Demonstration/ Practical, Ask examples or encourage to identify examples.	Practical/Demonstration	F&S	II	
CO4	Find and discuss examples of Vyapti (associations)in real life.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration. Ask examples or encourage to identify examples.	Practical/Demonstration	F&S	II	
CO4	Apply panchavayava vakya for drawing inference in practicals conducted	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Practical/Demonstration	F&S	II	
CO4	Identify and discuss Hetvabhas in given examples	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration. Ask examples or encourage to identify	Practical/Demonstration	F&S	II	

					examples.				
CO4	Draw inference in various sciences on the basis of Vyapti.	Cognitive/ recall	MK	**knows**	Demonstration/ discussion/ brainstorming	Practical/Demonstration	F&S	II	
Practical -10 Samanya Vishesh Siddhant Time (Practical/ Clinical 5 hours)									
CO 3	Discuss Samanya vishesh Siddhant	Cognitive/ Rcall	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Identify and classifies Samanya vishesh Siddhant with type in given examples.	Cognitive/ Comprehension	MK	**Knows how**	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practical	F&S	III	
CO 3	Identify samanyatva and visheshatva among plants in Vanaushadhi udyan	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration.	Viva/ Practicals	F&S	III	
CO 3	Make a chart/ eChart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas.	Cognitive/ Comprehension	MK	Knows how	Practical/Demonstration	Presentation/ Viva/ Practicals	F&S	III	
CO 3	Make a poster seasonal vegetables and fruits which are Samanya/Vishesha with the dosha.	Cognitive/ Comprehension	MK	Knows how	Practical	Presentation /Viva/ Practicals	F&S	III	
Practical -11 Samavay Time (Practical/ Clinical 1 hour)									

CO 3	Discuss Samavay	Cognitive/ Recall	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Mention five real life examples of Nitya and anitya sambandha.	Cognitive/ Comprehe nsion	MK	**Knows how**	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practical	F&S	III	
Practical -12 Abhav Time (Practical/ Clinical 1)									
CO 3	Discuss Abhav	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO 3	Write real life experiences of pragabhava, pradhwamsabhava, atyantabhava and anyonyabhav.	Cognitive/ Comprehe nsion	MK	**Shows**	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva	F&S	III	
Practical - 13 Upman Praman **Time** (Practical/ (Practical/ Clinical 1 hour)									
CO4	Discuss Upaman Praman	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva/ Practical	F&S	III	
CO4	Illustrate Upamana in practical examples and real life situation.	Cognitive/ Comprehe nsion	MK	Knows how	Demonstration/ Practical/ Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO4	Identify Examples of upamana from Ashtang	Cognitive/ Comprehe	MK	Knows how	Demonstration/ discussion/	Viva/ Practicals	F&S	III	

	Hridaya and Charak Samhita	nsion			brainstorming.				
CO4	Identify examples in Physics, chemistry biology where Upaman is used	Cognitive/ Comprehen sion	MK	Knows how	Demonstration/ discussion/ brainstorming/ Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
Practical -14 Yukti Praman Time (Practical/ Clinical 1 hour									
CO4	Discuss Yukti Praman	Cognitive/ Recall	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO4	Illustrate examples of Yukti in practical life or with your prior learning.	Cognitive/ Comprehe nsion	MK	Knows how	Demonstration/ Practical/ Ask exapmles or encourage to identify examples.	Viva/ Practicals Quiz	F&S	III	
CO4	Identify Role of Yukti in Nidan, Chikitsa and Anusandhan (research).	Cognitive/ Comprehe nsion	MK	Knows how	ECE/ Demonstration/	Viva/ Practicals/ PBL	F&S	III	
Practical -15 Various Vadas Time (Practical/ Clinical 3 hour)									
CO5 CO2	Discuss Satkaryavad	Cognitive/ Recall	MK	**Knows how**	Demonstration/ discussion/ brainstorming	Viva	F&S	III	
CO5 CO2	Justify Satkaryavad through real life	Cognitive/ comprehens ion	MK	Knows how	Demonstration/ Practical/ /Ask examples or	Viva/ Practicals/ PBL	F&S	III	

	examples/ examples from prior learning				encourage to identify examples.				
CO5 CO2	Justify Parinamvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Pakajotpatti through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Practical/Demonstration/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Swabhavoparamvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	**Knows how**	Demonstration/ discussion/ brainstorming/ /Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
CO5 CO2	Justify Arambhvad through real life examples/ examples from prior learning	Cognitive/ comprehension	MK	Knows how	Demonstration/ Practical//Ask examples or encourage to identify examples.	Viva/ Practicals	F&S	III	
Practical -16 Cause and Effect theory Time (Practical/ Clinical 2 hours)									
CO5, CO2	Discuss Cause and effect theory	Cognitive/ comprehend	MK	**Knows**	Demonstration/ discussion/ brainstorming	Viva/ Quiz	F&S	III	
CO5 CO2	Identify Samavayi, Asamavayi and Nimitta	Cognitive/ Comprehe	MK	Knows How	Demonstration/ Practical/Ask	Viva/ Practicals	F&S	III	

	karan of a Karya in real life examples/ examples withprior learning	nsion			examples or encourage to identify examples.				
CO5	Find out use of cause effect theory in other sciences.	Cognitive/ comprehens ion	MK	Knows how	Practical/Demon stration	Viva/ Practicals/ Debate	F&S	III	
CO5	Represent cause and effect schematically in any examples	Cognitive/ comprehens ion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	III	
CO5	Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya	Cognitive/ analysis	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	III	
CO5	Write theories of evolution you learned within and other than syllabus.	Cognitive/ comprehens ion	MK	Knows how	Practical/Demon stration	Viva/ Practicals	F&S	III	

Table 5: Non Lecture Activities Course AyUG-PV

Table 5- Course AyUG-PV Non Lecture Activities- 140

	List non lecture Teaching-Learning methods *	No of Activities
1	GROUP DISCUSSION	20
2	**PRACTICALS AND DEMONSTRATIONS**	45
3	ACTIVITY BASED LEARNING	10
4	PROBLEM BASED LEARNING	10
5	ENQUIRY BASED LEARNING	8
6	CASE BASED LEARNING	6
7	GAME BASED LEARNING	8
8	FLIPPED CLASSROOMS	6
9	DEBATE	8
10	SEMINARS	6
11	TUTORIALS	5
12	ROLE PLAY	5
13	SELF DIRECTED LEARNING	3
		140

Table 6: Assessment Summary AyUG-PV

6 A - Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	**AyUG-PV**	2	200	100	60	10 (Set-FB)	30	200	400

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15)*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D -Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	**Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.**
2.	Practical / Clinical Performance
3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project
11.	**AyUG-PV Specific** Test on Topics in list of practicals.

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-PV

Paper-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

AyUG PV

Paper-II

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A **List of topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 mark)**	**SAQ** **(5 marks)**	**LAQ** **(10 marks)**
1	**Ayurveda nirupana**	I	25	Yes	Yes	Yes
2	**Padartha and darshana nirupana**	I		Yes	Yes	Yes
3.	**Dravya vijnaneeyam**	II	48	Yes	Yes	Yes
4.	**Guna vijnaneeyam**	II		Yes	Yes	Yes
5.	**Karma vijnaneeyam**	II		Yes	Yes	Yes
6.	**Samanya vijnaneeyam**	III	27	Yes	Yes	Yes
7.	**Vishesha vijnaneeyam**	III		Yes	Yes	Yes
8.	**Samavaya vijnaneeyam**	III		Yes	Yes	No
9	**Abhava vijnaneeyam**	III		Yes	Yes	No

	Paper II			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1	**Pariksha**	I	**26**	YES	YES	YES
2	**Aptopdesha Pariksha/Pramana**	I		YES	YES	YES
3.	**Pratyaksha Pariksha/Pramana**	II	**42**	YES	YES	YES
4.	**Anumanapariksha/Pramana**	II		YES	YES	YES
5.	**Yuktipariksha/Pramana**	III	**32**	YES	YES	NO
6.	**UpamanaPramana**	III		YES	YES	NO
7.	**Karya- Karana Siddhanta**	III		YES	YES	YES

6 G- Question paper blue print

Paper I –

A Question Sr. No	B Type of Question	C Question Paper Format
.Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory (Must Know 15 MCQ Desirable to know 3 MCQ Nice to know 2 MCQ)	1. Topic number 1 2. Topic number 2 3. Topic number 3 4. Topic number 4 5. Topic number 5 6. Topic number 6 7. Topic number 7 8. Topic number 8 9. Topic number 9 10. Topic number 2 11. Topic number 3 12. Topic number 4 13. Topic number 5 14. Topic number 6 15. Topic number 7 16. Topic number 9 17. Topic number 1 18. Topic number 2 19. Topic number 3 20. Topic number 4
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory (Must know 7 . Desirable to know 1 No Questions on Nice to know.)	1. Topic no.1 2. Topic no.2 3. Topic no.3 4. Topic no.4 5. Topic no.5 6. Topic no.6/ Topic no.7 7. Topic no.8/ Topic no.9 8. Topic no.3/ Topic no.4
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory (All questions on Must to know. No Questions on Nice to know and Desirable to know.)	1. Topic no.1/ Topic no.2 2. Topic no.3 3. Topic no.4/Topic no.5 4. Topic no.6/ Topic no.7

Paper II

A Question Sr. No	B Type of Question	C Question Paper Format
Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory (Must know 15 MCQ Desirable to know 3 MCQ Nice to know 2 MCQ)	1. Topic number 1 2. Topic number 2 3. Topic number 3 4. Topic number 4 5. Topic number 5 6. Topic number 6 7. Topic number 7 8. Topic number 1 9. Topic number 2 10. Topic number 3 11. Topic number 4 12. Topic number 5 13. Topic number 6 14. Topic number 7 15. Topic number 1 16. Topic number 2 17. Topic number 3 18. Topic number 4 19. Topic number 7 20. Topic number 4
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory **(**Must know 7 . Desirable to know 1 No Questions on Nice to know.**)**	1. Topic no.1 2. Topic no.2 3. Topic no.3 4. Topic no.4 5. Topic no.5 6. Topic no.6 7. Topic no.7 8. Topic no.3/ Topic no.4
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory (All questions on must know No Questions on Nice to know and Desirable to know)	1. Topic no.1/ Topic no.2 2. Topic no.3 3. Topic no.4 4. Topic no.7

6 H Distribution of Practical Exam

Practical – (Practical 100 +Viva 60+Elective 10+ IA 30) =(Total 200 Marks)

SN	Heads	Marks
1	Practical (Total Marks 100)	**100**
a.	Spotting (4 Spots) Problem based on Principles in PV. Topics 1. Pratyaksha praman/Pratyaksha Badhakar Bhav 2. Vada (Any one) 3. Abhav/Samavay 4. Upaman/Yukti	20
b.	Journal of Activity book/ Projects. (Viva on journal and communication skill)	20
c.	Practical I (10 Marks Each) 1. Identify panchamahabhoot dominance in the given dravya 2. Identify Samanya- Vishesh in the given dravyas 3. Identify the Gunas in the given dravyas (Use different dravys for different students.)	30
d.	Practical II (Problem based questiones/ Situations)(10 Marks Each)(Any three) 1. Identify and explain the Karya Karan with types in given problem 2. Frame and Write Panchavayav vakya for the given anuman. 3. Identify Vyapti, Paksh, Sadhya, Hetu, Pakshadharmata, Sapaksha, Vipaksha in the give example. 4. Identify and explain Hetvabhas in given example. 5. Identify the vada applicable in given example.(any one vada.) 6. Identify Upama, Sajna- sajni sambhandha in given example.	30
2	Viva Voce	**60**
	Recitation of Shloka: 10 marks (sutras in Tarka sangraha, Samhitas, other)	
	Questions on Darshan 10 marks	
	Question on Dravya/ Guna/ Karma. 10 marks	
	Question on Samany/vishesh/samavaya/ Abhav 10 Marks	
	Question on one Praman 10 Marks	

	Question on Karya karan bhav 10 Marks.	
3	Internal Assessment	**30**
4	Electives	**10**
		200

7. References /Resourses

Reference Books

PadarthaVignana books		**Authorus**
1.	Padarthavigyan	Acharya Ramraksha Pathak
2.	AyurvediyaPadarthaVigyana	Vaidya Ranjit Rai Desai
3.	Ayurved Darshana	Acharya Rajkumar Jain
4.	PadarthaVigyana	Kashikar
5.	PadarthaVigyana	Balwant Shastri
6.	SankhyatantwaKaumadi	GajananShastri
7.	Psycho Pathology in Indian Medicine	Dr. S.P. Gupta
8.	CharakEvumSushrutkeDarshanik Vishay	Prof.Jyotirmitra Acharya
9.	AyurvediyaPadarthaVigyana	Dr. Ayodhya Prasad Achal
10.	PadarthaVigyana	Dr. Vidyadhar Shukla
11.	Post graduate text book of Samhitha&Sidhanta	Dr P.P.Kirathamoorthy and Dr Anoop AK
12	Padartha Vigyana	Dr. Ravidutta Tripathi
13.	AyurvediyaPadarthaVigyana	Vaidya Ramkrishna Sharma Dhand
14.	AyurvediyaPadartha Vigyan Parichaya	Vaidya Banwarilal Gaur
15.	AyurvediyaPadartha Darshan	Pandit Shivhare
16.	Scientific Exposition of Ayurveda	Dr. Sudhir Kumar
17	Padarthavignana and Ayurveda itihasa	Dr C R Agnives
18	Essentials of padarthavignana	Dr Vinodkumar MV
19	Padarthavignanevam Ayurveda Itihas	Dr RamnihorTapsi Jaiswal
20.	AyurvediyaPadarthavignana	Dr C R Agnives
21	AyurvediyaMoulikaSiddhanta	Dr V J Thakkar

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS

(PRESCRIBED BY NCISM)



KRIYA SHARIRA

(SUBJECT CODE- AyUG-KS)

HUMAN PHYSIOLOGY

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME

Kriya

NCISM

I professional Ayurvedacharya (BAMS)

Subject Code: AyUG KS

Kriya Sharir

Summary

AyUG KS **Total number of Teaching hours: 400**			
Lecture hours (LH) - Theory		**150 Hours**	**150 Hours (LH)**
Paper I	75 Hours		
Paper II	75 Hours		
Non-Lecture hours (NLH) – Theory		**50 Hours**	**250 Hours (NLH)**
Paper I	25 Hours		
Paper II	25 Hours		
Non-Lecture hours (NLH) - Practical		**200 Hours**	

AyUG KS **Examination (Papers & Mark Distribution)**				
Item	**Theory Component Marks**	**Practical Component Marks**		
		Practical	**Viva**	**IA**
Paper I	**100**	**100**	**70**	**30**
Paper II	**100**			
Sub-Total	**200**	**200**		
Total marks	**400**			

Preface

Kriya Sharir (Human Physiology) is an important subject of the BAMS program for the undergraduate students of Ayurveda. The term sharir means ‘in the sharir’ or ‘related to the sharir’ thus Sharir Kriya deals with the study of the human body concerning its physiological norms i.e., the functioning of the human body in its normal state. This subject refers to the physiology and biochemistry of contemporary medical science.

The swasthya of an individual is based on 3 pillars of the body i.e., dosha, dhatu & mala. Kriya Sharir subject mainly deals with these 3 pillars. The basic concepts, knowledge, and applicability of Tridosha (Vata, Pitta, Kapha), Sapta Dhatus (Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra), and Trimala (Mutra, Purish, Sweda) are very important in the critical understanding of the disease. Kriya Sharir also deals with Prakriti, Strotas, Kostha, Agni, Oja, Mana, Aahar (Basic principles of food), shatkriyakal, the system-wise study of contemporary science, senses function and dysfunction, etc. All these fundamental topics are essential for the proper understanding of etiopathogenesis, diagnosis of disease, and its management which will be covered in para-clinical and clinical subjects.

New curriculum of Kriya Sharir is designed considering cognitive, affective, and psychomotor domains. There are group discussions, workshops, field visits, and activities beyond the textbook during the practical hours like preparation of charts, models, seminar presentations by students. Kriya Sharir subject also deals with teaching-learning methods like role play, flipped the classroom, etc. Some assessment methods like OSPE, PBL, DOPS, CBD, skill assessment, etc are incorporated. The main aim of the curriculum is to highlight the basic knowledge and to give a new scientific approach to undergraduate students to develop their skills of Ayurveda and make them competent to apply in clinical practice and research.

Index

Course Code and Name of Course 5
AyUG KS 5
Kriya Sharir (Human Physiology) 5
Table 1- Course learning outcomes and matched PO. 5
Table 2 : Contents of Course AyUG KS 6
Paper I – AyUG-KS 6
Paper II – AyUG-KS 8
Table 3: Learning objectives (Theory) of Course AyUG-KS 11
PAPER I 11
PAPER II 36
List of Practicals 52
Table 4: Learning objectives (Practical) of AyUG- KS 53
Table 5: Non-Lecture Activities Course AyUG- KS 60
Table 6: Assessment Summary 62
6 A- Number of papers and Marks Distribution 62
6 B - Scheme of Assessment (formative and Summative) 62
6 C - Calculation Method for Internal assessment Marks (30 Marks) 62
6 D - Evaluation Methods for Periodical Assessment 63
6 E- Paper Layout 63
Paper-I 63
Paper-II 63
6 F- Disribution of Theory Exam 64
Paper I 64
Paper II 65
6 G- Question paper blue print 66
Paper I 66
Paper II 67
6 H Distribution of Practical Exam 68
7. References / Resourses 70

Course Code and Name of Course

	Course code	Name of Course
	AyUG KS	Kriya Sharir (Human Physiology)

AyUG KS Course

Table 1- Course learning outcomes and matched PO.

SR1 CO No	A1 Course learning Outcomes (CO) AyUG KS At the end of the course AyUG-KS, the student should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO 1	Explain all basic principles & concepts of Kriya Sharir along with essentials of contemporary human physiology and biochemistry related to all organ systems.	PO1, PO2
CO 2	Demonstrate and communicate normal and abnormal variables pertaining to Kriya Sharir such as Sara, Agni, Koshtha, Srotas etc.	PO2, PO3
CO 3	Differentiate between Prakriti and Vikriti in the individuals after carrying out relevant clinical examinations.	PO1, PO2, PO3, PO5
CO 4	Carry out clinical examination and experiments using equipments with interpretation of their results	PO4
CO 5	Differentiate the strengths & limitations of Ayurved and contemporary sciences	PO2
CO 6	Present a short project work / research activity covering the role of Kriya Sharir in preventive and promotive healthcare.	PO5, PO6, PO7, PO8, PO9
CO 7	Show a sense of curiosity and questioning attitude towards the life processes and to display compassion and ethical behaviour	PO2, PO5, PO6, PO7, PO9
CO 8	Effectively communicate verbally and in writing preferably using Ayurvedic terminology along with contemporary terminology among peers, teachers and community	PO8, PO9

Table 2 : Contents of Course AyUG KS

Paper I – AyUG-KS					
Sr No	**A2 List of Topics AyUG-KS** **Paper I**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**
PART-A (Marks-60)					
1	**Sharir:** Definition and synonyms of term Kriya, Sharir & Shaarir. Description of Sharir Dosha and Manasa Dosha. Mutual relationship between Triguna-Tridosha & Panchmahabhuta.	**I**	08	2	1
2	**Basic principles of Ayurveda:** Dosha dhatu mala mulam hi shariram. Description of basics of Srotas	**I**		2	1
3.	**Tridosha:** General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa- Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha.	**I**		3	0
4.	**Vata Dosha:** Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions.	**I**	26	6	2
5.	**Pitta Dosha:** Vyutpatti, Nirukti of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.	**I**		5	1
6.	**Kapha Dosha:** Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions.	**II**		4	1
7.	**Dosha Vriddhi-Kshaya:** Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.	**II**		1	1
8.	**Kriyakala:** Concept of Kriyakala, applied physiology of diseases produced due the vitiation of vata, pitta and kapha.	**II**		1	1
9	**Prakriti:** **Deha- Prakriti:** Vyutpatti, Nirukti, various definitions and synonyms for the term "Prakriti". Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti. **Manasa- Prakriti:** Introduction and types of Manasa- Prakriti	**II**		7	3
10.	**Ahara**: Definition, classification and significance of Ahara,	**III**		3	1

	Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.				
11.	**Agni**: Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.	**III**	26	4	1
12.	**Aharapaka** (Process of digestion): Description of Annavaha Srotas and their Mula. Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Role of Grahani & Pittadhara Kala. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.	**III**		7	2
PART-B (Marks-40)					
1	**Physiology Homeostasis**: Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane. Resting membrane potential and action potential. Acid-base balance, water and electrolyte balance. Study of basic components of food.	**I**	23	5	1
2	**Physiology of Respiratory system**: functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.	**II**		5	2
3	**Physiology of Gastrointestinal system**: Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system. Digestion and metabolism of proteins, fats and carbohydrates. Vitamins & Minerals- sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.	**II**		7	2
4	**Physiology of Nervous System**: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.	**III**	17	7	3
5	**Physiology of Endocrine glands**: General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.	**III**		6	2

Paper II – AyUG-KS					
	A2 **List of Topics** **Paper II**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
PART-A (Marks-60)					
1	**Dhatu**: Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)	**I**	18	2	1
2	**Rasa Dhatu**: Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara, characteristics of Tvakasara Purusha, conceptual study of Aashraya-Aashrayi Bhaava and its relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa	**I**		4	1
3.	**Rakta Dhatu**: Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshaya and Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta.	**I**		3	1
4.	**Mamsa Dhatu**: Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotas, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu, Concept of Peshi.	**I**		2	1
5.	**Meda Dhatu**: Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.	**I**		3	1
6.	**Asthi Dhatu**: Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.	**II**	19	2	1
7.	**Majja Dhatu** : Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of	**II**		3	1

	Majja Dhatu.				
8.	**Shukra Dhatu:** Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.	**II**		3	1
9	**Concept of Ashraya-Ashrayi bhava** i.e. inter-relationship among Dosha, Dhatu Mala and Srotas. Applied physiology of diseases asserting saptadhatu enlisted under dhatu pradoshaj vikar.	**II**		1	1
10.	**Ojas**: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisramsa, Vyapat and Kshaya.	**II**		3	1
11.	**Upadhatu**: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu. **Stanya**: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya. **Artava**: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas. **Tvak**: classification, thickness of layer and functions.	**II**	23	6	1
12.	**Mala**: Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala. **Purisha**: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshhaya of Purisha. **Mutra**: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshhaya of Mutra. **Sveda**: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshaya of Sveda. Discription of Svedvaha Srotas **Dhatumala**: Brief description of each type of Dhatumala.	**III**		6	2
13	**Indriya vidnyan**: Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya.	**III**		1	1
14	**Manas**: Properties, functions and objects of Manas. Physiology of Manovaha Srotas.	**III**		2	1
15	**Atma**: Properties of Atma. difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.	**III**		2	0
16	**Nidra & Swapna**: Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotpatti and types of Svapna.	**III**		2	0

PART-B (Marks-40)					
1	**Haemopoetic system**: composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.	**I**	18	5	2
2	**Immunity**: classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.	**I**		2	0
3	**Physiology of cardio-vascular system**: Functional anatomy of cardiovascular system. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous return. Physiological basis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control.	**I**		5	2
4	**Muscle physiology**: comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.	**II**	07	2	0
5	**Adipose tissue**: lipoproteins like VLDL, LDL and HDL triglycerides. Functions of skin, sweat glands and sebaceous glands.	**II**		2	1
6	**Physiology of male and female reproductive** systems: Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.	**II**	15	5	2
7	**Physiology of Excretion**: functional anatomy of urinary tract, functions of kidney. Mechanism of formation of urine, control of micturition. Formation of faeces and mechanism of defecation.	**III**		4	2
8	**Special Senses, Sleep and Dreams**: Physiology of special senses. physiology of sleep and dreams	**III**		5	1

Table 3: Learning objectives (Theory) of Course AyUG-KS

PAPER I									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the Students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
	Paper I (Part A) (60 Hours)								
	Topic 1 – *Sharir* (human body) (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Explain the definition and synonyms of the term *kriya*, *sharira* and *shaarira*	Cognitive (recall, comprehension)	Mk	K	Lecture	Written/ (MCQ, MEQ, LAQ, SAQ) Viva voce	F & S	I	
CO 2	Enlist the *sharira dosha* and *manasa dosha* and	Cognitive (recall, comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Explain mutual relationship between *trigun*a, *panchmahabhuta* and *tridosha*	Cognitive (comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 2 – Basic Principles of *Kriya Sharir* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Express critical view of why *dosha- dhatu-mala* are described in specific numbers.	Cognitive (recall)	Dk	Kh	Discussion	Written	F	I	
CO 1	Explain the principle of "*dosha-dhatu-mala mulam hi shariram".*	Cognitive (recall)	Mk	Kh	Lecture Discussion	Written	F & S	I	
CO 1	Discuss term homeostasis in *dosha-*	Cognitive (comprehension)	Dk	Kh	Discussion	Viva voce	F	I	

	dhatu-mala.								
CO 1	Explain role of *srotas* in the body.	Cognitive (comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Explain the basic concept of *srotas* and classify different *srotas* based on Rachana (morphological), *kriya* (functions) and *guna* (properties)	Cognitive (comprehension)	Mk	Kh	Lecture Discussion Flipped classroom	Written/ Viva voce	F & S	I	*Rachana sharir*
CO 1	Describe the significance of the knowledge of *srotas* in *kriya sharira*	Cognitive (comprehension)	Mk	Kh	Discussion	Written/ Viva voce	F & S	I	
CO 1	Compare *mula sthana* of *srotas* described in *samhitas* in view of *kriya sharir* and contemporary medical science	Cognitive (application)	Dk	Kh	Model Discussion Tutorial Assignment	Viva voce	F & S	I	
CO 1	Find out similarities and differences between *srotas* and system of contemporary science.	Cognitive (application)	Nk	Kh	Discussion Self-learning Think-Pair-Share	Short notes	F	I	
CO 1	Document observations on correlation of anyone environmental global change and physiological variation as per Ayurved, contemporary sciences.	Cognitive (application)	Nk	Kh	Discussion Self-learning Think-Pair-Share	Short notes	F	I	
CO 1	Recognize the contribution of Ayurveda in the formation of four basic principles of Bioethics mentioned in contemporary science.	Cognitive (recall) (comprehension)	Nk	Kh	Lecture Discussion	Written	F	I	
	Topic 3 – *Tridosha* (Three humors of the body) (3 hr) [Lecture: 3 hours, non-lecture: 0 hours]								
CO 1	Describe *utpatti*	Cognitive	Mk	K	Lecture	Written/	F & S	I	

	(prasad & malabhuta), locations of *dosha*.	(recall)				Viva voce			
CO 1	State biological rhythms or circadian cycle of *tridosha* based on day-night-age-season food intake and relation to the environment	Cognitive (comprehension)	Mk	Kh	Lecture discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Explain the applied role of *dosha* in maintaining health and State of equilibrium and recognize the role of *dosha* in the formation of *prakriti* of an individual	Cognitive (comprehension)	Mk	Kh	Lecture discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	State importance of *dosha* in lifestyle management and mutual relationship between *ritu-kala-dosha-rasa-guna*	Cognitive (application)	Nk	Kh	Discussion PBL	Viva voce	S	I	
CO 1	Interpret *gurvadi guna* of *dosha* in term of applied physiology and clinical aspect in different chapters of Charak.	Cognitive (application)	Nk	Kh	Discussion PBL/CBD	Written	F	I	*Padartha Vijnana. Kayachikitsa*
CO 1	Interpret *sama* & *niram* lakshana of dosha	Cognitive (comprehension)	Dk	Kh	Discussion	Written	F	I	
CO 1	Discuss the evidences of functional significance of *vata, pitta* and *kapha* in perspective of nervous, endocrine, immune or any other system.	Cognitive (application)	Nk	Kh	Discussion Think-Pair-Share	Self-assessment	SA	I	
CO 1	Discuss how to examine vruddhi-kshaya of dosha	Cognitive (comprehension)	Dk	Kh	Discussion PBL	Viva voce	S	I	
CO 1	State materialism and	Cognitive	Mk	Kh	Discussion	Viva voce	F	I	

	immaterialism of tridosha	(comprehension)							
	Topic 4 – *Vata dosha* (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]								
CO 1	Define the *vyutpatti* and *nirukti* of *vata*.	Cognitive (Recall)	Mk	K	Lecture	Written/ Viva voce	F & S	I	
CO 1	Describe *guna* and general locations of *vata dosha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe general properties & functions of *vata dosha* and demonstrate the normal *guan, karma of vata dosha* in a healthy person.	Cognitive (Comprehension)	Mk	Kh/Sh	Lecture Discussion	Written/ Viva voce	F & S	I	*Rognidan Vikriti Vidnyan*
CO 1	Enlist five types of *vata* and describe *prana, udana vata* with their specific locations, properties and functions.	Cognitive (Recall & Comprehension)	Mk	Kh	Lecture Confusion technique Demonstration Chart, Model	Written/ Viva voce Skill assessment	F & S	I	
CO 1	Explain the term *nishwas, ucchwas, shwasan* & describe the role of *prana vayu & udana vayu* in *shwasan prakriya*.	Cognitive (Comprehension)	Mk	Kh	Lecture	Written/ Viva voce	F & S	I	
CO 1	Describe *shwasan prakriya* according to *sharangadhar*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Model, Video	Written/ Viva voce	F & S	I	
CO 1	Describe clinical importance of classification of *swara* and *vyanjana* according to their *uccharana sthan*.	Cognitive (Application)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	SA	I	Sanskrit
CO 1	Describe the formation and articulation of *shabda* (words) and explain the bio-physiology of	Cognitive (Comprehension)	Dk	Kh	Lecture A/V aids.	Written/ Viva voce	F & S	I	

	induction of *vaak* and role of *udaan vaayu* in it.								
CO 1	Explain role of pranayama, *puraka*, *rechaka* and *kumbhaka* in *samyaka shwasana*, *swara/ ghosha utpatti*	Cognitive (Analysis)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	SA	I	*Swasthavrutta*
CO 1	Describe *samana* with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration Chart, Model	Written/ Viva voce	F & S	I	
CO 1	Describe *vyana vata* with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration Chart, Model	Written/ Viva voce	F & S	I	
CO 1	Describe role of *vyana vayu* & *samana vayu* in the process of *rasa-samvahanana*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Review the contribution of *vyan and saman vayu* in the process of cardiac circulation.	Cognitive (Comprehension)	Dk	K	Discussion	Written/ Viva voce	F	I	
CO 1	Interprete microbiota, gut brain axis for understanding enteric nervous system in perspective of *vata, saman vayu.*	Cognitive (Comprehension)	Nk	K	Discussion	Self-assessment	SA	I	
CO 1	Describe *Apana vata* with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Confusion technique Demonstration	Written/ Viva voce	F & S	I	

CO 1	Document & discuss your observations on correlation of functions of *apana vayu* with which type of nervous system & why?	Cognitive (Comprehension)	Nk	K	Discussion	Self-assessment	SA	I	
CO 1	Illustrate gati (directions) of types of vata by using lebel diagramme.	Cognitive (analysis)	Dk	Kh	Illustration	Self-assessment Peer evaluation.	SA	I	
CO3	Explain difference between *kshaya & vriddhi lakshana* of *vata Dosha*	Cognitive (Comprehension)	MK	Kh	Chalk-board Presentation Symposium Discussion	Written/ Viva voce	F & S	I	
CO5	Interpret which type of *vata dosha* gets vitiated and in which clinical condition the use of proper *aahar dravya* is prevalent as per *kshaya, vriddhi of vata dosha*.	Cognitive (Application)	Dk	Sh	Demonstration Discussion PBL	Written/ Viva voce	F & S	I	
CO 1	Recite and to explain the important verses of *vata dosha*. (ex-*sthana, karma, types, vriddhi and kshaya*)	Cognitive (Recall)	Dk	Sh	Discussion Recitation	Written/ Viva voce	F & S	I	Sanskrit Samhita
	Topic 5 – *Pitta dosha* (6 hr) [Lecture: 5 hours, non-lecture: 1 hour]								
CO 1	Define the *vyutpatti* and *nirukti* of *pitta*.	Cognitive (Recall)	Mk	Kh	Lecture	Written/ Viva voce	F & S	II	
CO 1	Describe *guna* and general locations of *pitta dosha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce Skill assessment	F & S	II	
CO 1	Describe general	Cognitive (Recall	Mk	Kh	Lecture	Written/	F & S	II	*Rognidan*

	properties & functions of *pitta dosha* and explain the normal *guna, karma of pitta dosha* in a healthy person.	& Comprehension)			Discussion Seminar	Viva voce			*Vikriti Vidnyan*
CO 1	Enlist five types of *pitta dosha* and describe *pachaka* with their specific locations, properties and functions.	Cognitive Recall	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO 1	Record your opinions about functions of pachak pitta and digestive enzymes seperatly.	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO 1	Describe *ranjaka* pitta with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO 1	Describe role of *ranjaka* pitta in *rasaranjan* process as per different *aacharyas*.	Cognitive (Comprehension)	Dk	Kh	Lecture	Written/ Viva voce	F & S	II	
CO 1	Interprete stages of erythropoiesis and role of intrinsic factor, vit. B_{12} etc in hemopoiesis.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	II	
CO 1	Describe *alochaka*, *bhrajaka*, *sadhaka* pitta with their specific locations, properties and functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce	F & S	II	
CO 1	Discuss rhodopsin and iodopsin along with *alochaka pitta* and note down	Cognitive (Recall)	Nk	Kh	Self study	Self-assessment	SA	II	

CO 1	Elaborate the functions of bhrajaka pitta in term physiology.	Cognitive (Comprehension)	Nk	Kh	Self study	Self-assessment	SA	II	
CO 1	Describe the role of *sadhaka* pitta in *sadhana*, concentration and observe changes upon heart rate and respiratory rate	Attitude (Imitation)	Nk	Sh	Discussion Demonstration	Self-assessment	SA	II	
CO 1	Find out similarities and differences between fuctions of sadhaka pitta and neurotransmitter.	Cognitive (Analysis)	Nk	Kh	Self study	Self-assessment	SA	II	
CO 1	Explain difference between *kshaya* & *vriddhi lakshana* of *pitta Dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 5	Interpret which type of *pitta dosha* gets vitiated and in which clinical condition the use of proper *aahar dravya* is prevalent as per *kshaya*, *vriddhi* of *pitta dosha*.	Cognitive (Application)	Dk	Sh	Demonstration Discussion PBL	Written/ Viva voce	F & S	II	*Swasthavrutta*
CO 1	Distinguish the similarities & differences between *agni* and *pitta* in terms of their *guna* with examples in compendia.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion PBL Seminar	Written/ Viva voce	S	II	
CO 1	Make inferences and find evidences / examples in daily regimen to support generalization of *agni* & *pitta* statement.	Cognitive (Analysis)	Nk	Sh	Demonstration Discussion Assignment PBL/CBL	Self-assessment	SA	II	
CO 1	Recite and explain the important verses of *pitta dosha*. (ex-	Cognitive (Recall)	Dk	Kh	Discussion Recitation	Written/ Viva voce	F & S	II	

	sthana, karma, types, vriddhi and kshaya)								
	Topic 6 – *Kapha dosha* (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								
CO 1	Define the *vyutpatti* and *nirukti* of *kapha dosha*.	Cognitive (Recall Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe general properties & functions of *kapha dosha* and demonstrate the normal *guan, karma* of *kapha dosha* in a healthy person.	Cognitive (Recall) (Application)	Mk	Kh	Lecture Discussion Demonstration	Written/ Viva voce Skill assessment	F & S	II	
CO 1	Enlist five types of *kapha dosha* & describe *bodhaka kapha kledaka, tarpaka* with their specific locations, properties and functions.	Cognitive (Recall)	Mk	Knows	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Identify the role of saliva in taste perception and also in other way.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe role of *kledaka kapha* in lubricating and protective properties of mucus.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the role of *tarpaka kapha* in protects the sensory organs.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe *avalambaka, sleshaka* with their specific locations, properties and functions.	Cognitive (Recall)	Mk	Knows	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the role of	Cognitive	Dk	Kh	Lecture	Written/	F & S	II	

	avalambaka in heart protection and *sleshaka kapha* in arthritis.	(Comprehension)			Discussion	Viva voce			
CO 1	Explain difference between *kshaya* & *vriddhi lakshana* of *kapha Dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	State importance of *prakrit shleshmik bala* / *veerya & vikrit shleshmik* mala & find out significance of above cognitive in applied aspect	Cognitive (Application)	Nk	Kh	Lecture Discussion	Self-assessment	SA	II	*Kayachikitsa*
CO 5	Interpret which type of *kapha dosha* gets vitiated and in which clinical condition the use of proper *aahar dravya* is prevalent as per *kshaya, vriddhi of kapha dosha*.	Cognitive (Application)	Nk	Sh	Demonstration Discussion PBL	Viva voce	F & S	II	*Swasthavrutta*
CO 1	Recite and explain the important verses of *kapha dosha*. (ex- *sthana, karma, vriddhi and kshaya*)	Cognitive (Recall & Comprehension)	Dk	Sh	Discussion Recitation	Written/ Viva voce	F & S	II	
CO 1	Describe neural & chemical communication system of body	Cognitive (Comprehension)	Nk	Kh	Self study	Self-assessment	SA	II	
	Topic 7 – *Dosha Vriddhi-Kshaya* (Hyper and hypo state of dosha) (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
CO 1	Describe etiological factors causing *tridosha vriddhi & kshaya* on the basis of *dravya, guna, karma, aahaar & vihara*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Dravyaguna*
CO 1	Describe, observe and interpret individual	Cognitive (Comprehension	Nk	Sh	Demonstration Discussion	Self-assessment	SA	II	

	causes and symptoms of *panchavidha vataprakopa.* (*Ashtanga Hridaya nidana sthana* 16)	Application)			PBL				
CO 1	Describe *vriddhi-kshaya lakshana of vata dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe *vriddhi & kshaya lakshana of pitta* and *kapha dosha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Enumerate the *nanatmaj vyadhi of tridosha*	Cognitive (Recall)	Nk	K	Lecture	Self-assessment	SA	II	
	Topic 8 – *Kriyakala* (Treatment as per prevalent kala) (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
CO 1	Explain the Concept of *kriyakala* & enumerate stages of *kriyakala*.	Cognitive (Recall) (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Rognidan Vikriti Vidnyan*
CO 1	Describe the stages *sanchaya*, *prakopa*, *prasara* of *kriyakala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the stages *sthansanshraya*, *vyaktavastha* & *bhedavastha* of *kriyakala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the applied physiology of diseases produced due the vitiation of *vata*, *pitta* and *kapha*.	Cognitive (Comprehension)	Nk	Sh	Lecture Discussion	Self-assessment	SA	II	
CO 1	Describe ideas given in the *shat-kriyakala* about preventive measures	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
	Topic 9 – *Prakriti* (*Deha- Prakriti, Manasa- Prakriti*) (Body constitution, personality, temperament of individuals) (10 hr) [Lecture: 7 hours, non-lecture: 3 hours]								
CO 1	Define the term *prakriti* and describe etymology & different	Cognitive (recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	

	meanings of the term *prakriti*.								
CO 1	Describe the role of different *matrijadi bhava* (genetic, intra-uterine and extra-uterine factors) influencing *prakriti* according to *Charaka and Sushruta*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Symposium	Written/ Viva voce	F & S	II	
CO 1	Describe the classification of different *prakriti* according to various Samhitas	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Enumerate types of *deha prakriti* and classify *deha prakriti* into eka-*doshaja*, *dvanvaja*, *samadoshaja*.	Cognitive (Recall)	Mk	Kh	Lecture Discussion Model Demonstration	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of *vata* prakriti according to *Charaka* Samhita	Cognitive (Comprehension)	Mk	Sh	Lecture Discussion Model Demonstration	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of pitta prakriti according to *Charaka* Samhita	Cognitive (Comprehension)	Mk	Sh	Discussion Role play real life experience	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of *kapha* prakriti according to *Charaka* Samhita	Cognitive (Comprehension)	Mk	Sh	Lecture Discussion video show Simulation	Written/ Viva voce	F & S	II	
CO 1	Describe *guna* of *vata*, *pitta* & *kapha prakriti* according to Vagbhata (abhiruchi) & *Sushruta samhita* (*anukatva*)	Cognitive (Comprehension)	Mk	Sh	Discussion Model Demonstration Team project work, Tutorial	Written/ Viva voce	F & S	II	
CO 1	Describe the *guna* (attributes) of *vata*, *pitta* & *kapha prakriti* according to	Cognitive (Comprehension)	Nk	Sh	Discussion	SA	SA	II	

	Sharangadhara Samhita								
CO 1	Describe the relationship between individual *prakriti* & *agni, koshtha.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe classification of *bhautik prakriti* and characteristic features of the individuals belonging to each kind of *bhautik prakriti*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe classification of manas *prakriti* and characteristic features of the *satvic prakriti*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the characteristic features of *rajasic* & *tamasic* manas *prakriti*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe classification of and characteristic features of the individuals belonging to each kind of *jatyadi-prakriti*	*Cognitive (Comprehension)*	*Mk*	*Kh*	*Lecture Discussion*	*Written*	*F & S*	II	
CO 1	Similarities and difference between the *sharirik* & *manas prakriti* descriptions given in various Samhitas.	Cognitive (Comprehension)	Dk	Kh	Discussion Team project work	Written	F	II	*Kayachikitsa*
CO 1	Significance of the Cognitive of *prakriti* in clinical aspect and *pathya-apathya kalpana* in *ahara* and *vihara* of each type of *prakriti*.	Cognitive (Comprehension)	Mk	Kh	Discussion Self-learning Buzz group	Written Role play	F & S	II	
CO 1	Appreciate the use of various validated tools for assessing	Cognitive (Application)	Mk	Sh	Discussion Tutorial, Demonstration	Written/ Viva voce	F & S	II	

	Ayurvedic concept of human constitution (prakriti) (software/ questionnaire) to evaluate *prakriti*- Ex-CCRAS portal								
CO 1	Describe the relevance of *desha-kala-ritu-vaya-ahara-vihara-satmya*, *aushadha* of parents especially of mother on *prakriti* of individual.	Cognitive (Application/ Analysis)	Dk	Kh	Tutorial, Discussion	Viva voce Seli-assessment	SA	II	*Kayachikitsa*
CO 1	Appreciate the application of recent advances in the domain of research related to *prakriti* (genetic, physiological basis)	Cognitive (Application/ Analysis)	Nk	Kh	Discussion	Seli-assessment	SA	II	
CO 1	Recite and explain the important verses of *vata*, *pitta* & *kapha doshaja prakriti*.	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Written/ Viva voce	F & S	II	
CO 1	Observe distinguish features of individuals of three contrasting *prakriti* types v*ata, pitta* and k*apha by* IGIB. Link: https://doi.org/10.1186/1479-5876-6-48	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	II	
CO 1	Observe standardized prakriti assessment tool by CCRAS. Link: doi/10.5005/jp-journals-10064-0019	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	II	
CO 1	Compare human constitution (prakriti) & genomic	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO 1	Record the known physiological variation	Cognitive (Application)	Dk	Kh	Real life experience	Demonstration	SA	II	

	of your friends in different *rutu* as per different *prakriti.*				Role play				
CO 1	Discuss correlation of genotype and phenotype with *prakriti*.	Cognitive (Comprehension)	Nk	Kh	Group discussion	Self-assessment	SA	II	
CO 1	Trace interrelationship between aging and prakriti	Cognitive (Comprehension)	Nk	Kh	Discussion	Self-assessment	SA	II	
CO 1	Point out hematological difference as per different prakriti.	Cognitive (Analysis)	Nk	Kh	Survey	Self-assessment	SA	II	
CO 1	Discuss *manas prakrIti* and personality.	Cognitive (Comprehension)	Dk	Kh	Role pay	Self-assessment	SA	II	
CO 1	Role of prakriti (Ayurgenomics) in the concept of personalised medicine	Cognitive (Comprehension)	Nk	Kh	Group discussion Seminar	Self-assessment	SA	II	
CO 1	Explore thes Immunophenotyping & human dosha prakriti.	Cognitive (Comprehension)	Nk	Kh	Online material	Self-assessment	SA	II	
	Topic 10 – *Ahara* (Diet and nutrition in Ayurveda) (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Describe the *Nirukti* (etymology)& *paribhasa* (definition) of ahar.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the *Bheda* (classification) and *upayogita* (importance) of *ahara*.	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Define, enlist and describe- the types of *ahara* in detail with examples	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	

CO 1	Define, enlist and describe *ashta ahara-vidhi-viseshayatana* (8 factors to be considered while preparing and processing the food) in detail with examples	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	III	*Swathavritta*
CO 1	Describe *ahara vidhi vidhana* (rules for consuming the food) in detail with examples.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explains the role of *ahara vidhi vidhana* in the context of present-day lifestyle, cooking habits and eating behaviour.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Real life experience Evidance based learning	Written/ Viva voce	F & S	III	
CO 1	Define, enlist and describe *ahara parinamkara bhava* (factors responsible for proper digestion) and the importance of each of these factors in the process of digestion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the concept of *viruddha ahara* (incompatible diet) and its relevance in present-day food processing methods and dietary consumption behaviour in individuals.	Cognitive (application)	Dk	Sh	Lecture Discussion Observation	Written/ Viva voce	SA	III	*Swathavritta*
CO 1	Explain the role of *ahara* in today's aspect related to *anupana* habits etc.	Cognitive (application)	Nk	Sh	Lecture Discussion	Self assessment	SA	III	
CO 1	Explain the role in today’s lifestyle of food, compatible food, the proper time for	Cognitive (application)	Nk	Sh	Lecture Discussion Assignment	Self-notes	SA	III	

	food taking, practice regarding food intake etc. in individual's health.								
CO 1	Explain dietary guidelines, how to eat food in Ayuvedic view.	Cognitive (application)	Nk	Kh	Lecture Discussion	Self assessment	SA	III	
	Topic 11 – *Agni* (The digestive fire of the body) (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								
CO 1	Describe different meanings of *agni* in different contexts and define *agni* in the context of *kriya sharir.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	State the importance of *agni* in maintaining the different aspects of human physiology	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate and explain the different synonyms of *agni* regarding *kriya sharir.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate and define various classifications of *agni* concerning their locations and functions in the body	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiological roles of *jatharagni*, *bhutagni* and *dhatvagni* and explain the differences and similarities between the three.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Kayachikitsa*
CO 1	Classify and explain the features of four functional / abnormal states of *jatharagni: samagni, vishamagni, mandagni & tikshnagn*i and explain evaluation process of *jarana-*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Rognidan*

	shakti.								
CO 1	Enumerate the factors affecting the normal functioning of Agni and the symptoms of improper functioning of *agni* seen in certain clinical conditions	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Viva voce	F	III	
CO 1	Enumerate and discuss different entities in the body that can represent different forms of *agni* from the contemporary physiology and biochemistry (hormones, enzymes etc) point of view	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Self assessment Debate	SA	III	
CO 1	Record the opinions among your friends on the concept of free radicals & antioxidant	Cognitive (Application)	Nk	Sh	Team project work	Team assessment	TA	III	
CO 1	Identify digestive and metabolic functions of *Agni* & its clinical importance.	Cognitive (Application)	Nk	Sh	Group discussion	Self Assessment	SA	III	
CO 1	Distinguish the similarities & differences between *agni* and *pitta* in terms of their *guna* with examples in compendia. (mentioned in pitta also)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion PBL	Written/ Viva voce	S	III	
	Topic-12. *Annapachana* / *Aahara-paka* (Digestion and metabolism in Ayurveda) (9 hr) [Lecture: 7 hours, non-lecture: 2 hours]								
CO 1	Describe the *annavaha srotas* along with its *mula sthana*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate and describe different organs of *annavaha*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	srotas and their important functions. according to Ayurveda and contemporary physiology								
CO 1	Describe three stages of digestion: *madhura, amla* and *katu avasthapaka* in detail	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	
CO 1	Describe the process of *udeerana* (increase/ release) of *vata, pitta, kapha* during *avasthapaka*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the formation of *prakrit* and *vaikrit dosha* (*prasadbhuta, malabhuta dosha*) and their role.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Rognidan*
CO 1	Describe the definition of *vipaka* (*nisthapaka*) and classification of *vipaka*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe how to identify *vipak* of *aahar* as per their effect on the body.	Cognitive (application)	Dk	Sh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the similarities and differences between *avasthapaka* and *nishthapaka*	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 1	Explain the role of different sub-types of *dosha* in the process of digestion: *bodhaka kapha, prana vayu, kledaka kapha, samana vayu, pachaka pitta, apana vayu* etc.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 1	Describe the process of separation of *saara* and *kitta*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	State the application of the theory of *pilu-paka* and *pithara paka* in *aharapaka*	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Self-assessment	SA	III	
CO 1	Explain the role of *grahani* & *pittadhara kala* & describe possible relation between *pittadhara* and *majjadhara* kala.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	State the importance of *pachaka pitta* and *jatharagni* in the process of digestion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the role of *bhutagni* and *dhatvagni* in *ahara parinaman*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the process of formation of *ahara-rasa* and absorption of *sara bhaga* / *anna-veerya*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Draw parallels between the different types of *agni* and various digestive enzymes and hormones	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Define *ahara gati, abhyavaharana shakti, annagrahana, pachana, vivechana, munchana and jaranashakti*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Discuss applied clinical aspect of *annavaha srotas*: *arochaka, ajirna, atisara, grahani, chardi, parinama shula* etc	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Viva voce CBD	F & S	III	

CO 1	Define different meanings of the term *koshtha* and explain the term in the context of *kriya sharira*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate the different types of *koshtha* according to the predominance of *dosha* (*krura-mridu and madhya*)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Panchakarma*
CO 1	State clinical significance of *koshtha* and the process of evaluating *koshtha* in an individual.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce DOPS	F & S	III	
	Part B (40 Hours) –								
	Topic 1 - Physiology Homeostasis (6 hr) [Lecture: 5 hours, non-lecture: 1 hour]								
CO 1	Define homeostasis and describe mechanisms of maintenance of homeostasis.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Distinguish between the shell temperature and core temperature	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Define the terms Cell death, Cell degeneration, Cell aging. Describe animal tissue.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe mechanism of positive and negative feedback system with at least two examples.	Cognitive (Recall/ Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the structure and function of cell, cell membrane, cytoplasmic	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

	organelles, genetic material (DNA & RNA.)								
CO 1	Explain the process of DNA replication & inhibitors of replication.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the acid-base balance, water and electrolyte balance.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the concept of pH & buffer systems in the body and Na-K pump	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe and discuss transport mechanisms across cell membranes. (Active & facilitated)	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe and discuss the molecular basis of resting membrane potential and action potential	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 2 - Physiology of respiratory system: (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]								
CO 1	Describe divisions of the respiratory system based on its functions.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe pulmonary circulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the mechanics of normal respiration, pressure changes during ventilation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the lung volume and capacities, compliance, diffusion of lungs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe and discuss the exchange and transport of gases - Oxygen and Carbon dioxide	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	

CO 1	Describe the neural and chemical control of respiration.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe physiological situations that affect respiration and discuss artificial respiration, dyspnoea, asphyxia, hypoxia, cynosis.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe Haldane effect & Kussmaul breathing.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe basic of pulmonary function tests.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 3 - Physiology of Gastrointestinal system (9 hr) [Lecture: 7 hours, non-lecture: 2 hours]								
CO 1	Describe enzyme and its fuctions in metabolism	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe functional anatomy and physiology of the digestive system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the functions of salivary glands, stomach, liver, gall bladder pancreas, small intestine, large intestine in the process of digestion and absorption.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the mechanism of secretion,composition, functions, and regulation of saliva, gastric, pancreatic, intestinal juices and bile secretion	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe GIT movements deglutition, peristalsis, defecation and control	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the major components of food, the process of digestion and	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	II	

	metabolism of proteins, fats and carbohydrates								
CO 1	Describe the physiological role of vitamins	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the Gut-Brain Axis and enteric nervous system, and its function	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Discuss the physiology aspects of gastro-oesophageal reflux disease, vomiting, diarrhoea, constipation	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
	Topic 4 - Physiology of Nervous System (10 hr) [Lecture: 7 hours, non-lecture: 3 hours]								
CO 1	Describe organization of nervous system.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the mechanism of propagation of nerve impulses.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the functions & properties of synapse, reflex, receptors	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the functional anatomy of the central nervous system (CNS) and peripheral nervous system (PNS)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of autonomous nervous system (ANS)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of sensory (general sensations) and motor nervous system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe and discuss spinal cord, its functions, lesion & sensory disturbances	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe and discuss functions of the cerebral cortex, basal ganglia,	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	thalamus, hypothalamus cerebellum, mid brain, pons and medulla oblongata.								
CO 1	Describe and discuss the physiological basis of intelligence, memory, learning and motivation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of cranial nerves	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe physiology of speech and articulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe physiology of temperature regulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of pain	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
	Topic 5 - Physiology of Endocrine glands (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]								
CO 1	Enlists and describe hormones & endocrine glands based on synthesis, secretion, transport, physiological actions, regulation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by anterior & posterior pituitary gland, their functions, disorders of pituitary gland (hyper & hypo activity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by the Thyroid gland, their functions & disorders of Thyroid and parathyroid gland (hyper and hypoactivity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by Pancreas,	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

	their functions & disorders of Pancreas (hyper and hypoactivity)								
CO 1	Describe hormones secreted by Adrenal cortex gland, their functions & disorders of Adrenal cortex gland (hyper and hypoactivity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe hormones secreted by Adrenal medulla gland, their functions & disorders of Adrenal medulla (hyper and hypoactivity)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enlist other Glands and their functions	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the synthesis and functions of local hormones	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

PAPER II

A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
	AyGU-KS								
	Paper II (60 Hours)								
	Topic-1. Introduction to *Dhatu* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Explain the etymology, derivation, definition, synonyms and general	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	*Sanskrit Samhita/*

	introduction of the term *dhatu.*								*Rognidan Vikriti Vidnyan*
CO 1	Explain the difference between *dhatu* and *upadhatu*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Explain different theories related to *dhatuposhana Nyaya* (nourishment of different *dhatus*).	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written / Viva voce	F & S	I	
CO 1	Explain the applicability of nyaya in the different physiological mechanisms.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Jigsaw	Written/ Viva voce	F & S	I	
CO 1	Describe *utpatti & poshana* of dhatu.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Compile various terminologies related to *dhau gati* and *dhatu poshana*	Cognitive (Comprehension)	Dk	Sh	Assignment Tutorial	Self-assessment	SA	I	
CO 1	Mention your opinion about *nyaya* concept on the basis of different metabolic pathways, transformation, transport of substances through cell membrane.	Cognitive (Application)	Nk	Kh	Group discussion Buzz group	Self-assessment	SA	I	
CO 1	Discuss theory of tissues formation and differentiation in context with physiological changes of aging.	Cognitive Application)	Nk	Kh	Group discussion Homework based assignment	Self-assessment	SA	I	
CO 1	Discuss stem cells along with concepts of regeneration in Ayurveda	Cognitive (Recall/ Comprehension)	Nk	Kh	Lecture Online teaching aids	self assessment	SA	I	
CO 1	Study Ayurvedic aspect of *dhatu sarata* and its application	Cognitive (Application)	Nk	Kh	Group discussion Seminar	Self-assessment	SA	I	
	Topic-2. *Rasa Dhatu* (5 hr) [Lecture: 4 hours, non-lecture: 1 hour]								

CO 1	Explain the etymology, derivation, location, properties, functions and *pramana* of r*asa-dhatu. panchabhautikatva* of *rasa dhatu*.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the functions of *rasavaha srotas* & *mula* of *rasavaha srotas*.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the process of formation of *rasa dhatu* from *aahara rasa*, and circulation of *rasa-rakt*a (*rasa-rakta samvahana*)	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe *kshaya-vriddhi* & *rasapradoshaja vikara*	Cognitive (Comprehension)	Mk	Kh	Lecture Assignment	Written/ Viva voce	F & S	I	
CO 1	Description of functioning of *hridaya* and physiological significance of *hridaya.*	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Flipped classroom	Written/ Viva voce	F & S	I	
CO 1	Description of *sira, dhamani and srotas*	Cognitive (Comprehension)	Nk	Kh	Discussion Video show	Written/ Viva voce	F & S	I	
CO 1	Enumerate *ashtavidha sara* (8 types of *sara*), and describe the features of individuals belonging to *tvak-saara purusha*.	Cognitive (Recall)	Mk	K	Lecture, Role play, real life experience, Discussion Brainstrorming	Written/ Viva voce	F & S	I	
	Topic-3. *Rakta Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Explain the etymology, derivation, synonyms, location, properties, functions and *pramana of rakta* dhatu & explain the *panchabhautikatva of rakta dhatu*,	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiology of *raktavaha srotas*, and describe the *mula of rakta-vaha srotas* and mutual interdependence of *rakta and pitta.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

CO 1	Describe the formation of *rakta-dhatu, ranjana of rasa* by Ranjaka *pitta*, features of *shuddha rakta*, specific functions of *rakta*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the characteristics of *raktasaara* Purusha	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the manifestations of *kshaya and vriddhi* and name *pradoshaja vikara* of *raktadhatu*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	I	*Vikriti Vigyana*
CO 1	Elaborate the concept about inclusion or exclusion of rakta dhatu as a fourth dosha.	Cognitive (Comprehension)	Nk	Kh	Discussion Brainstorming	Written/ Viva voce	F	I	
	Topic-4. *Mamsa Dhatu* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe the etymology, derivation, synonyms, location, properties and functions of *mamsa dhatu*, physiology of *mamsavaha srotas*, *mula* of *mamsavaha srotas*	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the formation of *mamsa dhatu* and the definition of *peshi* characteristics of *mamsasaara purusha*,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe manifestations of *kshaya* and *vriddhi* of *mamsa* Dhatu & describe the physiological basis of these manifestations. Name *mamsa pradoshaja vikara.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	*Vikriti Vigyana*
	Topic-5. *Meda Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								

CO 1	Describe the etymology, derivation, location, properties, functions and *pramana* of *meda dhatu*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the *medovaha srotas*, its *mula*, the physiology of *medovaha srotas*, formation of *medo dhatu*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the characteristics of *medasaara purusha* and manifestations of *kshaya* and *vriddhi* of *meda*. Name *meda pradoshaja vikara.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	
CO 1	Describe the clinical features of *sthaulya* and *karshya* along with the physiological basis of these clinical conditions	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Vikriti Vigyana*
CO 1	Record the properties of lipid & mamsa dhatu.	Cognitive (Comprehension)	Nk	Kh	Discussion	Self assessment	F	II	
	Topic-6. *Asthi Dhatu* (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe the definition, synonyms, classification, properties (*guna*), and formation of *asthi dhatu.*	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the *asthi dhara kala*; relation with *purishdharakala* and the features of *asthi sarata*.	Cognitive (Comprehension)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the applied physiology of *asthi dhatu (asthi vriddhi/ asthi kshaya)* and name *asthi pradoshaja vikara*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	*Vikriti Vigyana*

	Topic-7 *Majja Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Describe the definition, synonyms and location (*sthana*) of *majja dhatu.*	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the formation of *majja dhatu majjavaha srotas* and its *mula.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe *majja dhara kala* in relation with *pittadhara kala* and the features of *majja sarata.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe applied physiology of *majja dhatu (majja vriddhi and kshaya)* and name *majja pradoshaja vikara*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Assignment	Written/ Viva voce	F & S	II	*Vikriti Vigyana*
CO 1	Comment on concept of m*ajja dhatu* and bone marrow	Cognitive (Comprehension)	Dk	Kh	Discussion Online teaching aids	Self assessment	F	II	
	Topic-8. *Shukra Dhatu* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Describe the etymology and derivation of *shukra dhatu*, location, properties, *pramana* functions of *shukra dhatu*.	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the formation of *shukra dhatu*, *poshana krama* and its *updathu* and *mala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Puzzle	Written/ Viva voce	F & S	II	
CO 1	Describe the mula of *shukravaha srotas* and the properties of *shuddha shukra* along with *shukra saara purusha* symptoms.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the features of *kshaya* & *vriddhi* of	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	*Vikriti Vigyana*

	shukra dhatu & *shukra pradoshaja vikara*				Assignment				
CO 4	Identify histological structure explain structure of different tissue (dhatu)	Cognitive (Comprehension) Psychomotor	Mk	Kh	Demonstration Perform	Practical Skill assessment OSPE	F & S		
	Topic-9. *Ashraya- Ashrayi Bhava* (2 hr) [Lecture: 1 hour, non-lecture:1 hour]								
CO 1	Describe the concept of *ashraya-ashrayi bhava* i.e. inter-relationship among *dosha, dhatu mala and srotas*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*
CO 1	Describe the applied physiology of diseases affecting *saptadhatu* enlisted under dhatu *pradoshaja vikara*.	Cognitive (Comprehension)	Dk	Kh	Discussion Seminar	Written	F	III	
CO 1	Explain use of *Ashraya-Ashrayi Bhava* in laghan bruhan.	Cognitive (application)	Nk	Kh	Discussion	Self-assessment	SA	III	
	Topic -10. *Oja* (4 hr) [Lecture: 3 hours, non-lecture: 1 hour]								
CO 1	Recall etymological derivation, definition, classification, and *pramana* of *oja*	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the process of formation of *ojas* along with locations and properties	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the concept of *vyadhikshamatva*, explain *bala vriddhikara* bhava.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Classify *bala* and describe etiological factors (*kshaya karan*) for *oja visramsa, vyapat and kshaya* and elaborate	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*

	the manifestation of these clinical conditions.								
CO 1	Collect different opinoins on oja given by different aacharya and try to understand the logic behind it.	Cognitive (Recall)	Nk	Kh	Discussion	Written	F	III	
CO 1	Interpret your opinion about oja-bala-kapha in its normal state.	Cognitive (Recall)	Nk	Kh	Discussion	Self-assessment	SA	III	
	Topic-11. *Upadhatu* (7 hr) [Lecture:6 hours, non-lecture: 1 hour]								
CO 1	Describe the general introduction, etymological derivation and definition of the term *upadhatu*	Cognitive (Recall)	Mk	K	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the formation, nourishment, properties, location and functions of each *upadhatu*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the characteristic features and methods of assessing *shuddha* and *dushita stanya*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*
CO 1	Describe the characteristic features of *vriddhi* and *kshaya* of *stanya*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe characteristic features of *shuddha* and *dushita artava* along with enumerating the differences between *raja* and *artava*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe *artava-vaha srotas* and its *mula* along with the common clinical conditions related to *artava-vaha srotas*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Vikriti Vigyana*

	(kashtartava, vandhyata, pradara etc).								
CO 1	Describe the classification, thickness of each layer and functions of *tvak*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Interpret the skin layer as per contemporary science.	Cognitive (Recall)	Nk	Kh	Discussion	Written	F	III	
	Topic 12. *Mala* (8 hr) [Lecture: 6 hours, non-lecture: 2 hours]								
CO 1	Describe the etymological derivation and definition of the term *mala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Enumerate *aharamala* and describe of the process of formation of *aharamala*.	Cognitive (Recall)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the etymological derivation, definition, formation, properties, quantity and functions of *purisha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of *purishavaha srotas, purish visarjana* and manifestations of *vriddhi* and *kshhaya* of *purisha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the relation between *purishdhara kala* and *asthidhara kala*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the etymological derivation, definition, formation, properties, quantity and functions of *mutra*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of *mutravaha srotas* and the process of urine formation and *mutra visarjana* in Ayurveda.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 1	Explain the manifestations of *vriddhi* and *kshhaya* of *mutra*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the urge of micturition & defecation in perspective of reflexes	Cognitive (Application)	Nk	Kh	Discussion	Self-assessment	SA	III	
CO 1	Describe and enumerate *dhatumala* and describe the functions of each type of *dhatumala*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the etymological derivation, definition, formation and functions of *sveda.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the functions of *svedvaha srotas* along with describing the manifestations of *vriddhi and kshaya of sveda*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Review Ayurveda compendia for several colour of purish and mutra as per their different diseased conditions.	Cognitive (Application)	Nk	Kh	Discussion	Self-assessment	SA	III	
	Topic 13. *Indriya vijnyana* (2 hr) [Lecture: 1 hour, non-lecture: 1 hour]								
CO 1	Describe the *pancha-jnyaanendriya* and physiology of perception of *shabda, sparsha, rupa, rasa and gandha*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Tutorial	Written/ Viva voce	F & S	III	*Padarth vidnyan*
CO 1	Describe the physiology of *karmendriya*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
	***Topic 14. Manas* (3 hr)** [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe location and properties, functions and objects of *manas.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

CO 7	Describe the physiology of *dhee, driti, smriti* and *manovaha srotas* along with the applied physiology of *unmada and apasmara*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Real life experience	Written/ Viva voce	F & S	III	*Kayachikitsa*
CO7	Decribe *kriyatmak* (physiological) importance of *manas*	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
	Topic 15. *Atma* (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Describe properties and functions of *atma*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S		
CO 7	Enumerate the difference between *paramatma* and *jivatma*, characteristic features of *atma* in living beings.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	*Padarth vidnyan*
CO 7	Explain characteristic features of *atma* in living beings.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO7	Decribe *kriyatmak* (physiological) importance of *atma*	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion tutorials	Written/ Viva voce		III	
	Topic 16. *Nidra* & *Svapna* (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Describe the process of *nidrotpatti*, classify *nidra.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Explain the physiological and clinical significance of *nidra.*	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe *svapnotpatti* and types of *svapna*.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Discuss about different types of *swapna* among your friends and try to understand ralation of *swapna* & *prakriti*.	Cognitive (Comprehension)	Nk	Kh	Group Discussion	Team assessment	TA	III	

	Part B (40 Hours) –								
	Topic 1. Physiology of Hemopoietic System (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]								
CO 1	Describe the composition, functions of blood and blood cells.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Stages and development of RBCs, WBCs, platelets.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the composition and functions of bone marrow	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the process of erythropoiesis and explain necessary facors for erythropoiesis.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the formation & destruction of RBCs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the structure, types, synthesis and functions of haemoglobin along with abnormalities of Hb.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the types of WBCs	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the mechanism of hemostasis, (coagulation of blood) and blood clotting factors.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Describe the ABO & Rh system of blood group and explain the physiological basis of blood groups.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	Medical Physiology
CO 1	Explain the concept of erythroblastosis fetalis on the basis of Rh incompatibility.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
CO 1	Describe the classification and	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

	functions of plasma proteins.								
CO 1	Describe the properties and hemostasis functions of platelets.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiological basis of manifestations of different blood disorders (anaemia, jaundice etc.)	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the functions of spleen.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the functions of functions of lymph.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
	Topic 2. Immune System (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Describe classification of immunity (Innate, acquired and artificial),	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Distinguish between the passive immunization and active immunization	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the applied physiology of immunity: Immunodeficiency diseases, Hypersensitivity reactions, Auto-immune diseases etc.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion Seminar	Written/ Viva voce	F & S	I	
	Topic 3. Cardiovascular Physiology (7 hr) [Lecture: 5 hours, non-lecture: 2 hours]								
CO 1	Describe the mechanical and electrical properties	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	

	of heart muscles, describe different phases of the Cardiac cycle.								
CO 1	Describe the physiological and clinical significance of heart sounds.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiology of regulation of cardiac output and venous return.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiological basis of ECG.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the regulation of heart-rate and arterial pulse,	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Define and describe the regulation of systemic arterial blood pressure	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the physiology of fetal circulation.	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Define and describe the regulation of systemic arterial blood pressure	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	I	
CO 1	Describe the history of the discovery of blood circulation	Cognitive (Comprehension)	Nk	Kh	Online	Self assessment	SA	I	
	Topic 4. Muscle physiology (2 hr) [Lecture: 2 hours, non-lecture: 0 hours]								
CO 1	Compare and contrast the functions and properties of skeletal muscles, cardiac muscles and smooth muscles.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the physiology of muscle contraction of all types of muscles.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
	Topic 5. Skin, Adipose Tissue and circulating Lipids (3 hr) [Lecture: 2 hours, non-lecture: 1 hour]								
CO 1	Describe the functions of the skin, sweat glands, sebaceous glands and subcutaneous tissue	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	

CO 1	Describe the functions of Adipose Tissue including adipokines	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the process of formation & metabolism of lipoproteins like VLDL, LDL and HDL and that of triglycerides.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the functional anatomy and physiology of the male reproductive system	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the physiology of regulation of spermatogenesis, functions of testosterone and male sexual act	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe physiology of the female reproductive system including oogenesis, ovulation and hormonal regulation of the menstrual cycle	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the functions of placenta	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the physiology of lactation	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
CO 1	Describe the applied physiology of the reproductive system of male and female infertility.	Cognitive (Comprehension)	Nk	Kh	Lecture Discussion	Written/ Viva voce	F & S	II	
	Topic 7. Renal Physiology (6 hr) [Lecture: 4 hours, non-lecture: 2 hours]								
CO 1	Describe the functional anatomy of kidney.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the functions of kidney, ureters and bladder.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe stages of the mechanism of urine formation.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion Semiar	Written/ Viva voce	F & S	III	

CO 1	Describe control of micturition.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the role of Juxta glomerular apparatus in regulation of blood pressure and pH of body fluids.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	Medical Physiology
CO 1	Describe the applied physiology of the urinary system (urolithiasis, acute and chronic renal failure etc).	Cognitive (Comprehension)	Dk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of special senses.	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the visual process and visual pathway	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the mechanism of hearing and auditory pathway	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the taste, smell and skin sensation	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	
CO 1	Describe the physiology of sleep and dreams	Cognitive (Comprehension)	Mk	Kh	Lecture Discussion	Written/ Viva voce	F & S	III	

List of Practicals

PRACTICALS (Marks-100)				
	List of Topics	**Term**	**Lecture**	**Non-Lecture**
1	Dhatu sararata parikshana	**I**	0	10
2.	Demonstrate laboratory equipment (spotting)	**I**	0	1
3.	Demonstrate blood collection	**I**	0	1
4.	Estimate haemoglobin	**I**	0	2
5.	Estimate bleeding time & clotting time	**I**	0	2
6.	Estimate blood grouping	**I**	0	2
7.	Prakriti parikshana	**II**	0	20
8.	Dosha vriddhi kshaya parikshana	**II**	0	4
9.	Dhatu vriddhi kshaya parikshana	**II**	0	5
10.	Nadi parikshana	**II**	0	3
11.	Pulse examination	**II**	0	2
12.	WBC estimation	**II**	0	2
13.	RBC estimation	**II**	0	2
14.	DLC estimation	**II**	0	2
15.	Measurement of Blood pressure	**II**	0	2
16.	Perform the procedure Inspection of respiratory system	**II**	0	2
17.	Perform the procedure Inspection of heart sound	**II**	0	3
18.	Agni parikshana	**III**	0	6
19.	Koshtha parikshana	**III**	0	2
20.	Urine examination	**III**	0	2
21.	Demonstrate ESR, PCV	**III**	0	1
22.	Observe the procedure of ECG	**III**	0	2
23.	Perform the procedure of examining the cranial nerves and reflexes	**III**	0	2

Table 4: Learning objectives (Practical) of AyUG- KS

A4 Course outcome	B4 Learning Objective (At the end of the session, the Students should be able to)	C4 Domain/ sub	D4 Must to know/ desirable to know/Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
	AyUG – KS Practical (100 marks) (Total 200 Hr)								
	Practical (100 marks) =(Kriya Sharir 50 + Physiology 30 + Non Lecture practical activities 20)								
	***1. Assessment of prakriti parikshana* (20 classes)** [Lecture: 0 hours, non-lecture: 20 hours]								
CO 3	Describe the procedure of *prakriti parikshan* of CCRAS portal.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe Tutorial	Practical Viva voce	F & S	II	
CO 3	Demonstrate *prakriti parikshan* under the supervision of teacher.	Psychomotor	Mk	Sh	Demonstration in practical room & Bed side clinic Discussion	Viva voce	F & S	II	
CO 3	Determines *prakriti* of a paerson in an individual independently	Psychomotor	Mk	Dose	Demonstration in practical room & Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE, DOPS, CBD, Simulation	F & S	II	
CO 1	Recite verses of *vata, pitta & kapha prakriti*.	Cognitive (Recall Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	II	
	***2. Assessment of dhatusarata parikshana* (10 classes)** [Lecture: 0 hours, non-lecture: 10 hours]								
CO 2	Describe the procedure of	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	I	

	dhatusarata parikshana								
CO 2	Demonstrate *dhatusarata parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration in practical room & Bed side clinic Discussion Assist	Viva voce	F & S	I	
CO 2	Evaluates *dhatusarata* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE, DOPS, CBD, Simulation	F & S	I	
CO 1	Recite verses of *ashta dhatusarata*.	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	I	
	***3. Assessment of agni parikshana* (6 classes)** [Lecture: 0 hours, non-lecture: 6 hours]								
CO 2	Discribe the procedure of *agni parikshana*	Cognitive/ comprehension	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	III	
CO 2	Demonstrate *agni parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	III	
CO 2	Analyse *agni* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	III	
CO 1	Recite verses of *agni*.	Cognitive (Recall & Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	III	
	***4. Assessment of koshtha parikshana* (2 classes)** [Lecture: 0 hours, non-lecture: 2 hours]								
CO 2	Discuss the procedure of *koshtha parikshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	III	
CO 2	Demonstrate *koshtha parikshana* under the	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion	Viva voce	F & S	III	

	supervision of the teacher.				Assist				
CO 2	Evaluate *koshtha* of an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion rform	Practical Viva voce Skill assessment OSPE	F & S	III	

	***5. Assessment of dosha vrddhi kshaya lakshana* (4 classes)** [Lecture: 0 hours, non-lecture: 4 hours]								
CO 3	Discuss the procedure of *dosha vrddhi kshaya lakshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	II	
CO 3	Demonstrate *dosha vrddhi kshaya parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II	
CO 3	Perform *dosha vrddhi kshaya parikshana* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 1	Recite verses of *dosha vrddhi kshaya.*	Cognitive (Recall Comprehension)	Dk	Kh	Discussion Recitation	Viva voce	F & S	II	
	***6. Assessment of dhatu vrddhi kshaya parikshana* (5 classes)** [Lecture: 0 hours, non-lecture: 5 hours]								
CO 3	Describe the procedure of *dhatu vrddhi kshaya lakshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce	F & S	II	
CO 3	Demonstrate *dhatu vrddhi kshaya parikshan* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II	
CO 3	Perform *dhatu vrddhi kshaya parikshan* in an individual independently	Psychomotor	Mk	Dose	Demonstration Bed side clinic Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 1	Recite verses of	Cognitive	Dk	Kh	Discussion	Viva voce	F & S	II	

	dhatu vrddhi kshaya.	(Recall & Comprehe nsion)			Recitation				

	7. Assessment of nadi parikshana **(3 classes)** [Lecture: 0 hours, non-lecture: 3 hours]								
CO 5	Describe the procedure of *nadi parikshana*	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observation Tutorial	Practical Viva voce	F & S	II	
CO 5	Demonstrate *nadi parikshana* under the supervision of the teacher.	Psychomotor	Mk	Sh	Demonstration Bed side clinic Discussion Assist	Viva voce	F & S	II	
CO 5	Find out recent advances in nadi pariksha	Cognitive	Mk	Kh	Lecture Demonstration Discussion Observe	Practical Viva voce OSPE	F & S	II	
	Part B 30 practical of 2 hr each								
	[Lecture: 0 hours, non-lecture: 30 hours]								
CO 4	Explain the general laboratory etiquette demonstrate the use of laboratory equipment.	Cognitive Psychomotor	Mk	Sh	Lecture Demonstration Discussion Observe	Practical Viva voce Skill assessment OSPE	F & S	I	
CO 4	Discuss procedure of collection of a blood sample – prick, venepuncture method, use of anticoagulants.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	I	
CO 4	Describe Observe procedure of haemoglobin estimation, bleeding time and clotting time, blood grouping and Rh typing,	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	I	

	differential Leukocyte Counting procedure.								
CO 4	Evaluate Hb, Bleeding time, clotting time, blood grouping & Rh typing, sebveral Leukocyte Count (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	I	
CO 4	Describe the procedure of WBC counting, RBC counting.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Count WBC, RBC (independentl y).	Psychomotor	Mk	D	Perform	Practical	F	II	
CO 4	Discribe the procedure of ESR, PCV	Cognitive	Mk	Sh	Lecture Demonstration Discussion Assist	Viva voce	F	III	
CO 4	Describe the procedure of physical and chemical examination of urine.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	III	
CO 4	Identify physical and chemical properties of urine.	Psychomotor	Dk	Sh	Lecture Demonstration Discussion Assist	Practical Viva voce Skill assessment OSPE, DOPS	F & S	III	
CO 4	Discuss the procedure of pulse examination demonstrated.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Examine pulse independently.	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Describe the procedure of measurement of blood pressure	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	

CO 4	Measure blood pressure (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Discuss the procedure of inspection of CVS and assessment of heart sounds	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Illustrate inspection of CVS and assessment of heart sounds (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Discuss the procedure of ECG recording demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce Spotting	F & S	II	
CO 4	Discuss procedure of inspection of the respiratory system demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce	F & S	II	
CO 4	Examine of the respiratory system (independently).	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	II	
CO 4	Discuss the procedure of examining the cranial nerves and reflexes (superficial/ deep /visceral) demonstrated by the teacher.	Cognitive	Mk	Kh	Lecture Demonstration Discussion Assist	Viva voce Skill assessment OSPE	F & S	III	
CO 4	Perform the procedure of examining the cranial nerves and	Psychomotor	Mk	Sh	Lecture Demonstration Discussion Perform	Practical Viva voce Skill assessment OSPE	F & S	III	

	reflexes (superficial/deep/ visceral) by students independently.								

Table 5: Non-Lecture Activities Course AyUG- KS

Theory Non Lecture 50 (Paper I -25 & Paper II-25)		**No of Activity hours**
1.	Assignment - homework based	3
2.	Brainstorming	2
3.	Buzz group	1
4.	Case based learning	1
5.	Confusion technique	1
6.	Debate	1
7.	Demonstration	2
8.	Direct observation skill (DOPS)	1
9.	Flipped classroom	1
10.	Group Discussion	3
11.	Jigsaw or puzzle	1
12.	Mnemonics	2
13.	Model based learning	1
14.	Online teaching aids	1
15.	Panel discussion	1
16.	Problem based learning	2
17.	Real-life experience	1
18.	Recitation	3
19.	Role Play	1
20.	Self directed learning	3
21.	Seminar by students	5
22.	Simulated condition	1
23.	Skill assessment	2
24.	Symposium	2
25.	Team project work	1
26.	Think-Pair-Share	2
27.	Tutorial	3
28.	Video show	2
Practical Non Lecture 100 (200 hours)		
1.	Ayurveda Practicals – 50	100
2.	Modern Practicals – 30	60
3.	Activity based learning – 20	40
	Communication Skills, Small project / Experiment designing, Task-based learning, Teamwork based learning, Team project, Problem Based Learning (PBL)/(CBL), Group Discussion, Workshops, Field visits, Preparation of charts 1, models and computerized simulation models etc. , Seminar presentations by students	
	Total Non Lecture hours	**250**

Additional Suggested topics for tutorials

Point No.	Name of Topic
T – 1 CO 6	*Atma lakshana*
T – 2 CO3	Characteristics of *Prakriti Eka doshaja, dwandwaja and sama prakriti. Clinical importance of deha prakriti, anukatva.*
T – 3 CO5	*Nadi vigyan*
T – 4 CO6	*Anukatva*
T – 5 CO6	*Indriya panch panchak and physiological study of panchajyanendriya and panchakarmendriya.*
T – 6 CO6	*Meanings of terminologies used for dhatu poshana nyaya related to dhatu poshana*
T – 7 CO1	*Ahara dravya vargikarana*
T – 8 CO1	*Avasthapaka & Vipak*

Suggested topics for seminar topics

Sr. No.	Content
S – 1 CO8	*Tridosha*
S – 2 CO8	*Agni*
S – 3 CO8	*Rasa rakta samvahan*
S – 4 CO8	*Pranavah srotas and shwasana prakriya*
S – 5 CO8	*Ashtavidh sara*
S – 6 CO8	*Trividh nyaya*
S – 7 CO8	*Prakriti*
S – 8 CO8	Basic concept of nervous system
S – 9 CO8	Rh Incompatibility
S – 10 CO8	Digesion of Carbohydrates, proteins & fats
S – 11 CO8	Blood clotting mechanism
S – 12 CO8	Immune system
S – 13 CO8	O_2-Co_2 gasious exchange
S – 14 CO8	Hormones
S – 15 CO8	Renal system

Suggested topics for group discussion

Sr. No.	Content
GD – 1 CO1	*Dosha dhatu mala mulam hi shariram*
GD – 2 CO1	*Concept of agni*
GD – 3 CO1	*Concept* of *upadhatu*
GD – 4 CO1	Role of *ranjak pitta in formation of rakta dhatu*
GD – 5 CO1	Concept of *srotas*
GD – 6 CO1	Physiology of *purishadhara kala / asthidhara kala. Pittadhara kala/ majjadhara kala*
GD – 7 CO1	Generation of *doshas*
GD – 8 CO1	*Ashraya-ashrayi bhava sambhadha of asthi and vata*
GD – 9 CO1	Process of *urine formation described in ayurveda compendia*
GD – 10 CO1	*Avasthapaka*
GD – 11 CO1	Concept of *shatkriyakala*
GD – 12 CO1	*Manas Prakriti*

Table 6: Assessment Summary

6 A- Number of papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-KS	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative)

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST **	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods for Periodical Assessment
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Other activities explained in Table 3 Column G3 as per indicated term and objective of the top]ic.

6 E- Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-KS

Paper-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100.

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

AyUG-KS

Paper-II

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100.

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20

Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F- Disribution of Theory Exam

	Paper I **Part-A (Marks-60)**			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics AyUG-KS**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1	**Sharir:**	**I**	8	Yes	Yes	No
2	**Basic principles of Ayurveda:**	**I**		Yes	Yes	No
3.	**Tridosha:**	**I**		Yes	Yes	No
4.	**Vata Dosha:**	**I**	26	Yes	Yes	Yes
5.	**Pitta Dosha:**	**I**		Yes	Yes	Yes
6.	**Kapha Dosha:**	**II**		Yes	Yes	Yes
7.	**Dosha Vriddhi-Kshaya:**	**II**		Yes	Yes	No
8.	**Kriyakala:**	**II**		Yes	Yes	No
9	**Prakriti:** **Deha- Prakriti:** **Manasa- Prakriti:**	**II**	26	Yes	Yes	Yes
10.	**Ahara**:	**III**		Yes	Yes	Yes
11.	**Agni**:	**III**		Yes	Yes	Yes
12.	**Aharapaka**	**III**		Yes	Yes	Yes
Part-B (Marks-40)						
1	**Physiology Homeostasis**:	**I**	23	Yes	Yes	Yes
2	**Physiology of Respiratory system**:	**II**		Yes	Yes	Yes
3	**Physiology of Gastrointestinal system**:	**II**		Yes	Yes	Yes
4	**Physiology of Nervous System**:	**III**	17	Yes	Yes	Yes
5	**Physiology of Endocrine glands**:	**III**		Yes	Yes	Yes

	Paper II PART-A (Marks-60)			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics AyUG-KS**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
Part-A (Marks-60)						
1	**Dhatu**:	**I**	18	Yes	Yes	No
2	**Rasa Dhatu**:	**I**		Yes	Yes	Yes
3.	**Rakta Dhatu**:.	**I**		Yes	Yes	Yes
4.	**Mamsa Dhatu**:	**I**		Yes	Yes	Yes
5.	**Meda Dhatu**:	**I**		Yes	Yes	Yes
6.	**Asthi Dhatu**:	**II**	19	Yes	Yes	Yes
7.	**Majja Dhatu** :	**II**		Yes	Yes	Yes
8.	**Shukra Dhatu:**	**II**		Yes	Yes	Yes
9	**Concept of Ashraya-Ashrayi bhava**	**II**		Yes	Yes	No
10.	**Ojas**:	**II**		Yes	Yes	Yes
11.	**Upadhatu**: **Stanya**: **Artava**: **Tvak**:	**II**	23	Yes	Yes	Yes
12.	**Mala**: **Purisha**: **Mutra**: **Sveda**: **Dhatumala**:	**III**		Yes	Yes	Yes
13	**Indriya vidnyan**:	**III**		Yes	Yes	Yes
14	**Manas**:	**III**		Yes	Yes	Yes
15	**Atma**:	**III**		Yes	Yes	No
16	**Nidra & Swapna**:	**III**		Yes	Yes	No
Part-B (Marks-40)						
1	**Haemopoetic system**:	**I**	18	Yes	Yes	Yes
2	**Immunity**:	**I**		Yes	Yes	No
3	**Physiology of cardio-vascular system**:	**I**		Yes	Yes	Yes
4	**Muscle physiology**:	**II**	07	Yes	Yes	No
5	**Adipose tissue**:	**II**		Yes	Yes	No
6	**Physiology of male and female reproductive**	**II**	15	Yes	Yes	Yes
7	**Physiology of Excretion**:	**III**		Yes	Yes	Yes
8	**Special Senses, Sleep and Dreams**:	**III**		Yes	Yes	Yes

6 G- Question paper blue print

Paper I

AyUG-KS		
A **Question Sr. No**	**B** **Type of Question**	**C** **Question Paper Format**
.Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ	**MCQ no. Topic No** 1. Topic number part A 1 2. Topic number part A 2 3. Topic number part A 3 4. Topic number part A 4 5. Topic number part A 4 6. Topic number part A 5 7. Topic number part A 6 8. Topic number part A 7 9. Topic number part A 8 10. Topic number part A 9 11. Topic number part A 9 12. Topic number part A 10 13. Topic number part A 11 14. Topic number part A 12 15. Topic number part A 12 16. Topic number part B 1 17. Topic number part B 2 18. Topic number part B 3 19. Topic number part B 4 20. Topic number part B 5
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory Must know - 7 SAQ Desirable to know - 1 SAQ No questions on Kice to know	1. Topic no. Part A 1/ Topic no. Part A 2/ Topic no. Part A 3 2. Topic no. Part A 4/ Topic no. Part A 5/ Topic no. Part A 6 3. Topic no. Part A 7/Topic no. Part A 8 4. Topic no. Part A 9/Topic no. Part A 10 5. Topic no. Part A 11/ Topic no. Part A 12/ 6. Topic no. Part B 1/ Topic no. Part B 2/ 7. Topic no. Part B 3 8. Topic no. Part B 4/ Topic no. Part B 5
Q3	**Long answer Questions (LAQ)**	1. Topic no. Part A 4/ Topic no. Part A 5/ Topic no. Part A 6 2. Topic no. Part A 9/ Topic no. Part A 10/ Topic no. Part A 11/

	Four Questions 10 marks each All compulsory All questions on must know. No Questions on Nice to know and Desirable to know	Topic no. Part A 12 3. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3 4. Topic no. Part B 4/ Topic no. Part B 5

Paper II

AyUG-KS		
A **Question Sr. No**	**B** **Type of Question**	**C** **Question Paper Format**
.Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory Must know part - 15 MCQ Desirable to know - 3 MCQ Nice to know part - 2 MCQ	**MCQ no. Topic no.** 1. Topic number part A 1/2 2. Topic number part A 3 3. Topic number part A 4/5 4. Topic number part A 6 5. Topic number part A 7 6. Topic number part A 8 7. Topic number part A 9/10 8. Topic number part A 11 9. Topic number part A 12 10. Topic number part A 13/14/15/16 11. Topic number part B 1 12. Topic number part B 2 13. Topic number part B 3 14. Topic number part B 4 15. Topic number part B 5 16. Topic number part B 6 17. Topic number part B 6 18. Topic number part B 7 19. Topic number part B 7 20. Topic number part B 8
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory Must know - 7	1. Topic no. Part A 1/ Topic no. Part A 2/ Topic no. Part A 3/ Topic no. Part A 4/ Topic no. Part A 5 2. Topic no. Part A 6/ Topic no. Part A 7/ Topic no. Part A 8/ Topic no. Part A 9/ Topic no. Part A 10 3. Topic no. Part A 11/ Topic no. Part A 12 4. Topic no. Part A 13/ Topic no. Part A 14/ Topic no. Part A 15

	Desirable to know - 1 SAQ No questiona on Nice to know	Topic no. Part A 16 5. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3/ 6. Topic no. Part B 4/ Topic no. Part B 5 7. Topic no. Part B 6/ Topic no. Part B 8 8. Topic no. Part B 7
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory All questions on Must know. No Questions on Nice to know and Desirable to know	1. Topic no. Part A 2/ Topic no. Part A 3/ Topic no. Part A 4/ Topic no. Part A 5 2. Topic no. Part A 6/ Topic no. Part A 7/ Topic no. Part A 8/ Topic no. Part A 10 3. Topic no. Part A 11/ Topic no. Part A 12/ Topic no. Part A 13/ Topic no. Part A 14 4. Topic no. Part B 1/ Topic no. Part B 2/ Topic no. Part B 3

6 H Distribution of Practical Exam

(Practical 100 +Viva 70+ IA 30) = (Total 200 Marks)

	AyUG-KS		
SN	**Heads**	**Topic**	**Marks**
A	**Practical**		
1	**Spotting**	Spotting (including two problem-based test) 1. Histology slide 2. ECG report (counting heart rate etc.) 3. Blood report (normal-abnormal values and significance) 4. Photograph of prakriti character. 5. Problem based sara/agni parikshan. 6. Case of vrudhhi kshay lakshan. 7. Aplicability of one spot used in haematological practical. 8. Identify the difference between two things & use. 9. Model based 10. Human experiment related	10 Marks
2	**Ayu. Practical**	Performance based components. (Take only one practical separately OR make combination of few components of more than one practical) Ayurveda practical - Prakriti parikshana (Self / volunteer / patients)	40 Marks

		Sara parikshana Agni & koshtha *parikshana* Dosha vrddhi-kshaya lakshana/ Dhatu vriddhi -kshaya Lakshana	
3	**Lab. Practical**	Laboratory practical (Hb, BT, CT, Blood group, Urine exam) Human physiology practical (pulse examination, BP, heart sounds, reflexes)	30 Marks
4	**Project work**	Project work (Activity based)	10 Marks
5	**Practical Record**	Practical Record	10 Marks
		Total	**100 Marks**
B	**Viva Voce**	General viva voce based on Ayurveda (20), Viva on instruments (20), Structured viva on Part B (refer Table 2)(10), Recitation of verses (15), and Communication skill (5)	70 Marks
C	**IA**	Internal Assessment	30 Marks
		Total Marks	**200 Marks**

7. References / Resourses

• Ayurvediya Kriyasharir - Ranjit Rai Desai
• Kayachikitsa Parichaya - C. Dwarikanath
• Prakrit Agni Vigyan - C. Dwarikanath
• Sharir Kriya Vigyan - Shiv Charan Dhyani
• Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
• Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
• Prakrita Dosha Vigyana - Acharya Niranjana Dev
• Tridosha Vigyana - Shri Upendranath Das
• Sharira Tatva Darshana - Hirlekar Shastri
• Prakrita Agni Vigyana - Niranjana Dev
• Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
• Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
• Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
• Pragyogik Kriya Sharir - Acharya P.C. Jain
• Kaya Chikitsa- Ramraksha Pathak
• Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
• Concept of Agni - Vd. Bhagwan Das
• Purush Vichaya - Acharya V.J. Thakar
• Kriya Sharir - Prof. Yogesh Chandra Mishra
• Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
• Sharir Kriya Vigyana - Prof. Jayaram Yadav & Dr. Sunil Verma.
• Kriya Sharir mcq – Dr. Kiran Tawalare
• Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology) - Dr. Srikant Kumar Panda
• Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
• Human Physiology in Ayurveda - Dr Kishor Patwardhan
• Textbook of Physiology - Gyton & Hall
• Review of medical physiology – William Ganong
• Essentials of Medical Physiology - Sembulingam, K.
• Concise Medical Physiology - Chaudhari, Sujit. K.
• Fundamental of Anatomy & Physiology - Martini
• Principals of Anatomy & Physiology - Tortora & Grabowski
• Human Physiology - Richards, Pocock
• Samson Wrights Applied Physiology, Keele, Neil, joels
• Ayurveda Kriya Sharira - Yogesh Chandra Mishra
• Textbook of Medical Physiology - Indu Khurana
• Tridosha Theory - Subrahmanya Shastri
• Dosha Dhatu Mala vigyan – S. G. Vartak
• Purush Vichaya – Jayanad Thakar
• All Samhitas.
• Ayurvediya Shabda kosha.
• Vachaspatyam
• Shabdakalpadrum
• Monir Williams Sanskrit dictionary.

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



RACHANA SHARIRA
(SUBJECT CODE- AyUG-RS)
HUMAN ANATOMY
(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism
प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME
Rachana

NCISM

I Professional Ayurvedacharya (BAMS)

Subject Code: AyUG-RS

Rachana Sharir

(Human Anatomy)

Summary

AyUG-RS Total number of Teaching hours: 500			
Lecture hours (LH) - Theory		**180 Hours**	**180 Hours (LH)**
Paper I	90 Hours		
Paper II	90 Hours		
Non-Lecture hours (NLH) – Theory		**80 Hours**	**320 Hours (NLH)**
Paper I	40 Hours		
Paper II	40 Hours		
Non-Lecture hours (NLH) - Practical		**240 Hours**	

AyUG-RS Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100**	**100**	**70**	**--**	**30**
Paper II	**100**				
Sub-Total	**200**	**200**			
Total marks	**400**				

Preamble

The primary purpose for teaching Rachana sharir to undergraduate students is to provide a thorough understanding of the basic principles of Sharir. Gross and microscopic structure and development of the human body in perspective of ancient and modern sciences, as well as to acquire necessary skills. Sharir in Ayurveda also provides in depth views to concepts like Marma and srotas. Learning of Sharir is most useful in further years in diagnosis and management of the diseases.

Various teaching and learning methods, including didactic, demonstration, tutorial, group discussion, seminars, Integrated Teaching (IT), Problem Based Learning (PBL), and Early Clinical Exposure (ECE), Case-Based Learning (CBL), Virtual Dissection, and cadaveric dissection, are used to transfer knowledge to students, and the syllabus is constructed accordingly. As a result, the students appreciate being a part of the teaching and learning process. This will help the students to become competent, self-assured, caring, and concerned humans capable of providing ethical medical treatment.

Index

Course Code and Name of Course 5
AyUG RS 5
Rachana Sharir (Human Anatomy) 5
Table 1- Course learning outcomes and matched PO. 5
Table 2: Contents of Course AyUG-RS 6
Paper I 6
Paper II AyUG-RS 8
Table 3: Learning objectives (Theory) of Course AyUG-RS 10
Paper I 10
Paper II 21
List of Practicals AyUG-RS 32
Table 4: Learning objectives (Practical) of AyUG- RS 34
Table 5: Non-Lecture Activities Course AyUG-RS 40
Table 6: Assessment Summary 40
6 A - Number of Papers and Marks Distribution 40
6 B - Scheme of Assessment (formative and Summative) AyUG-RS 40
6 C - Calculation Method for Internal assessment Marks (30 Marks) AyUG-RS 41
6 D - Evaluation Methods for Periodical Assessment 41
6 E - Paper Layout 42
PAPER-1 42
PAPER-1I 42
6 F – I - Distribution of Theory exam AyUG- RS 43
Paper I 43
Paper II 43
6 F – II - Theme table 44
Paper-I: 44
Paper-II 44
6 G Question paper Blue print for AyU-RS: 45
PAPER-I 45
PAPER-II 46
6 H - I - Distribution of Practical Exam 47
6 H - II Practical Spot examination 47
6 H - III Viva Voce 49
7. Reference and Resourses 49

Course Code and Name of Course

	Course code	Name of Course
	AyUG RS	**Rachana Sharir (Human Anatomy)**

AyUG RS

Table 1- Course learning outcomes and matched PO.

SR1 CO No	**A1 Course learning Outcome (CO) AyUG RS At the end of the course AyUG RS, the student should be able to-**	**B1 Course learning Outcome matched with program learning outcomes.**
CO1	Describe the fundamentals of Rachana Sharir, interpret and analyze it in relevant context and recognize its significance in Ayurveda	**PO1, PO2**
CO 2	Explain Garbha Sharir and Embryology in Ayurveda and modern science respectively with clinical significance	**PO1, PO2**
CO 3	Describe and demonstrate all the bones and joints with attachments of associated structures and its clinical application	**PO1, PO2**
CO 4	Explain the concept of Sira-Dhamani-Strotas, their organization in the human body and its applied aspect	**PO1, PO2**
CO 5	Identify the Marmas and understand its classification along with its importance in preventive and therapeutic aspect	**PO1, PO2**
CO 6	Explain and demonstrate the gross anatomy of the organs of various systems and their applied anatomy in perspective of Ayurveda and Modern science	**PO1, PO2, PO3**
CO 7	Explain the Indriya Sharir and Sensory organs with its application in preventive and therapeutic domain.	**PO1, PO2**
CO 8	Identify and locate all the structures of body and mark the topography of the living Sharir.	**PO1, PO3**
CO 9	Respect the cadaver and perform dissection with commitment to reiterate the theoretical aspect of Ayurved Rachana Sharir and contemporary sciences.	**PO1, PO3, PO5**
CO 10	Describe the basic principles of imaging technologies and identify the anatomical structures in the radiograph	**PO1, PO2, PO3**

Table 2: Contents of Course AyUG-RS

Paper I					
SN	**A2** **List of Topics AyUG-RS**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	**Shariropkramaniya Shaarira** • Sharir and Shaarir vyakhya (definitions of sharira and sharira) • Shadangatvam (Six regions of the body) • Anga Pratyanga vibhaga (subdivisions) • Sharir shastra vibhag • Sharir gyan prayojan and its description in contemporary science with its clinical importance	**I**	6	4	2
2	**Paribhasha Shaarira** • Kurcha, Kandara, Jala, Asthisamghata, Seemnta, Seevani, Rajju, and lasika • Terminologies related shadang sharir	**I**	4	3	1
3.	**Garbha Shaarira** • Garbha Vyakhya (Definition of Garbha) • Concept of Shukra and Artava • Garbhavkranti. Masanumasik grabhavruddhi • Role of panchamahabhoot in Garbhavruddhi • Concept of Beeja, Beejabhaga, Beejabhagavayava • Garbhposhana • Apara nirmiti, Garbhanabhinadi • Garbha Angapratyanga utpatti according to different Acharya • Garbha Vikruti	**I**	15	17	5
4.	**Asthi Shaarira** Enumeration of Asthi, Types, asthi swaroopa, with its applied aspect	**I**	4	2	1
5.	**Sandhi Shaarira** • Description of Sandhi and its enumeration, • Types of Sandhi with its clinical importance • Introduction of diseases of Sandhi explained in Ayurveda	**II**	4	2	3
6.	**Snayu sharir** Concept of Snayu and its clinical importance	**II**	3	2	1
7.	**Peshi Shaarira** • Description of Peshi, • Utpatti, types, Swaroop, function with its importance	**II**	3	2	1
8.	**Kesha, Danta, Nakha Sharir** • Description of Panchbhautik swaroop and its applied value • Explanation of its swabhava (Pitruja) and its applied value • Description of Prakrita (normal) and Vikruta(abnormal) Swaroop (appearance) of kesha, danta, nakha in concern with disease • Importance of examination of kesha, danta, nakha	**II**	4	2	1

	as diagnostic tool				
9	**Embryology** • Definitions and branches of embryology. • Embryo and Fetus. Sperm and Ovum, Fertilization, Cleavage. • Germ layers formation and their derivatives. • Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. • Fetal circulation, Placenta formation, Umbilical cord formation	**I**	5	7	2
10	**Osteology** • Bone: structure, types and ossification. • Description of each bone with clinical anatomy	**I**	12	9	6
11	**Arthrology** • Joints: structure, types and movements. • Description of joints of extremities, inter-vertebral joints and temporomandibular joint with their clinical anatomy.	**II**	10	10	6
12	**Myology** • Structure and types of muscles. Description of important muscles: origin, insertion, actions, nerve supply and clinical anatomy. • Muscle movements in Yogasana	**II**	4	6	2
13	**Nervous System** • Nervous system: Introduction and classification • Meninges • Description of Brain and Spinal cord. • Description of Peripheral Nervous System: Cranial and Spinal nerves, Brachial, Cervical, Lumber and Sacral nerve plexus, • Anatomical consideration of Autonomic Nervous System, • Formation and circulation of cerebrospinal fluid • Blood supply of Brain and Spinal cord.	**III**	14	14	4
14	**Endocrinology** • Description of endocrine glands (Pituitary, Thyroid, Parathyroid, Thymus, Pineal and Suprarenal glands) with clinical aspects. • Histology of all glands.	**III**	8	8	3
15	**Lymphatic system** • Introduction Structure included in lymphatic system: Lymph vessels, Lymph nodes, Lymph glands with their clinical importance.	**III**	4	2	2

Paper II AyUG-RS					
SN	**A2** **List of Topics AyUG-RS**	**B2** **Term**	**C2** **Marks**	**D2** **Lecture hours**	**E2** **Non-Lecture hours**
1	**Pramana Sharira:** Anguli pramana & Anjali praman with its applied importance	**II**	2	2	1
2	**Koshtha Evam Ashaya Sharira** • Definition of Kostha with its applied importance and • Enumeration of Koshthanga and its description • Concept of Ashaya with its clinical importance	**I**	4	2	1
3.	**Sira Sharir** • Concept of Sira • Nirukti, types, enumeration of Sira and its applied aspect • Introduction to Sira vedha	**II**	4	3	1
4.	**Dhamani Sharir** • Concept of Dhamani • Nirukti, types, enumeration of Dhamani and its applied aspect	**II**	2	2	1
5.	**Strotas Shaarira** • Concept of Strotas • Nirukti, types, number of Srotas, Strotomool and its applied aspect • Types of Strotas and its description. • Applied aspect of Strotas	**II**	7	8	3
6.	**Kala Shaarira** • Definition and etymology of Kala • Enumeration and description of Kala • Applied aspect of Kala	**III**	4	2	2
7.	**Indriya Shaarira** • Definition of Indriya, Indriya artha and Indriya adhisthan, • Number and importance of Indriya • Description of Gyanendriya, Karmendriya and Ubhayendriya (Manas). • Ayurved sharir of Indriya adhistan- Karna, Twacha, Netra, Jivha, Nasa • Applied aspect of Indriya	**III**	3	3	1
8.	**Twacha Sharir** Definition, types and characteristics of Twacha with its clinical importance, significance of Twacha adhisthana in disease manifestation, its relation with Dhatu.	**III**	3	2	2
9	**Marma Sharira** • Marma: definition, enumeration, classification, location • Surface demarcation of Marma • Explanation of Trimarma	**II**	15	13	4

	• Detail description of Marma with its applied importance.				
10	**Respiratory System** • Bronchial tree and Lungs with their clinical aspects. • Respiratory tract: Nasal cavity, Pharynx, Larynx, Trachea • Pleura with its clinical aspects • Diaphragm and its opening • Histology of all organs	**II**	10	6	4
11	**Digestive system** • Regions of abdomen • Organs of digestive tract (alimentary tract) with their clinical aspects. • Digestive glands: Liver, Spleen and Pancreas. • Description of peritoneum with its clinical aspects • Histology of all organs	**I**	12	10	6
12	**Cardiovascular system** • Description of Heart • Structure of artery & vein • Importance blood vessels with their course and branches. • Pericardium with applied aspect • Histology of Heart	**II**	8	8	3
13	**Urinary System** • Urinary tract: Kidney, Ureter, Urinary Bladder and Urethra with their clinical aspects • Histology of all organs	**II**	10	8	3
14	**Reproductive system** • Male Reproductive system: Reproductive organs, Scrotum and glands (Testis, Prostate and Seminal vesicles) with their clinical aspects. • Female reproductive system: Introduction of external genital organ in brief and internal reproductive organs in detail, tract and glands with clinical importance. • Histology of all organs	**III**	6	7	3
15	**Sensory organs** Description of structures of Eye, Ear, Nose, Tongue and Skin with their clinical aspects.	**III**	10	14	5

Table 3: Learning objectives (Theory) of Course AyUG-RS

Paper I RACHANA SHARIR –									
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/ sub	D3 Must to know/ desirable to know/Nice to know	E3 Level Does/ Shows how/ Knows how/ Know	F3 T-L method	G3 Assessment	H3 Formative /summative	I3 Term	J3 Integration
Topic 1- Shariroupkramaniya [Time: Lecture: 04 hours, non-lecture 02 hours] Practical- 02 hours									
CO1	Define Sharir.	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce/ Open book test	F&S	I	
CO1	Describe the constitutional elements of Sharir	Cognitive/ Comprehension	MK	Knows	Lecture	Written/ viva-voce	F&S	I	
CO1	Analyze the Constitutional hierarchy of Sharir and its relevance	Cognitive/ analyze	DK	Knows how	Lecture/ GD	Written / viva-voce	F&S	I	
CO1	Enlist Anga -Pratyanga and specific terms for each Pratyanga	Cognitive/ Recall	MK	Knows	Lecture/ GD	Written/ viva-voce	F&S	I	
CO1	Describe the Importance of Pratyaksha (Demonstration & Dissection) method of learning Sharir	Cognitive - comprehension	MK	Knows how	Lecture/ demonstration/ TT/ GD	Written / viva-voce	F&S	I	
CO1	Explain the Mruta Samshodhana as mentioned	Cognitive / Comprehension	MK	Knows	Demonstration/ simulation/	Written / viva-voce	F&S	I	

	in Sushruta Samhita and as per the modern science.	Psychomotor							
CO1	Appraise the concept of body donation and its relevance in present scenario	Cognitive - analysis, Affective	NK	Knows	Lecture/ educational video/ SDL	Written / viva-voce	F&S	I	
Topic 2- Paribhasha Sharir [Time: Lecture: 03 hours, non-lecture 01 hours] Practical- 6 hours									
CO1	Explain the terms Kandara, Kurcha, Mamsa, Rajju, Sevani, Jala, Seemant, Asthi Sanghat in context to its enumeration, site and structure.	Cognitive / comprehension	MK	Knows	Lecture/ Demonstration	Written/ viva-voce/ Open book test	F&S	I	
CO1	Evaluate the clinical importance of Kandara, Kurcha, Mamsa, Rajju, Sevani, Jala Seemant, Asthi and Samghat	Cognitive/ Application	DK	Knows how	Lecture/ Demonstration/ SDL	Written/ viva-voce	S	I	
Topic 3- Garbha Sharir [Time: Lecture: 17 hours, non-lecture 05 hours]									
CO 2	Define Garbha and recall the related verse from samhitas.	Cognitive / knowledge	MK	Knows	Lecture/ Recitation	Written/ viva-voce	F & S	I	-
CO 2	Explain the concept of Shukra and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows	Lecture/ Recitation	Written/ viva-voce	F & S	I	-
CO 2	Explain the concept of Artava and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows	Lecture/ recitation	Written/ viva-voce	F & S	I	-
CO 2	Describe the role of tridosha and panchamahabhuta in the fetal development	Cognitive / comprehension	MK	Knows how	Lecture/ IT	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Explain the concept of Beeja, Beejbhaag, Beejabhagavayava	Cognitive / Comprehension	MK	Knows	Lecture/ GD/ TT	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra

CO 2	Describe Masanumasik Garbha vriddhi kram and recall the related verse from samhitas.	Cognitive / comprehension	MK	Knows how	Lecture/ Recitation/ demonstration with 3D animated video	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe Garbhaposhana	Cognitive / comprehension	MK	Knows how	Lecture	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe the formation of Apara according to Ayurved	Cognitive / knowledge	MK	Knows, Knows how	Lecture/ demonstration with 3D animated video	Written/ viva-voce/ Open book test	F & S	I	-
CO 2	Describe Garbha nabhinadi	Cognitive / knowledge	MK	Knows	Lecture	Written/ viva-voce	F & S	I	-
CO 2	Explain Angapratyanga utpatti with the related verse from samhitas.	Cognitive / comprehension	MK	Knows how	Lecture/ demonstration with 3D animated video/	Written/ viva-voce/ Assignments/ Open book test	F & S	I	Dept. of Streerog Prasuti tantra
Topic 4- Asthi Shaarira [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Enlist the number of Asthi according to different Acharyas	Cognitive/ Recall	MK	Knows how	Lecture	Written / viva-voce/ Open book test	F & S	I	
CO1	Describe the Asthi Sanghata and Asthi Simanta	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
Topic 5- Sandhi Sharir [Time: Lecture: 02 hours, non-lecture 03 hours]									
CO 3	Define the term Sandhi	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Classify Sandhi into different types.	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce/ project work	F&S	II	
CO 3	Demonstrate the movements of Chala Sandhi and	Cognitive – Application	MK	shows	Lecture +	Written/ viva-voce	F&S	II	

	comprehend the structural appearance	Psychomotor			Demonstration thorugh model/ simulation				
CO 3	Illustrate the applied aspect of Sandhi and introduction of diseases of Sandhi explained in Ayurveda	Cognitive - Application	DK	Knows how	Lecture/ ECE/ SDL/ Seminar	Written/ viva-voce/ Assignment	F&S	II	Kayachi kitsa
Topic 6- Snayu Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 6	Describe Snayu with respect to its definition, structure, types, number, importance with its clinical importance	Cognitive/ comprehensi on	MK	Knows how	Lecture with demonstration/ SDL/Seminar	Written/ Viva -voce/ Open book test	F&S	II	
Topic 7- Peshi Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 5	Describe Peshi Sharir and its classification as per Ayurveda	Cognitive – comprehensi on	MK	Knows	Lecture/ Demonstration/ SDL/ Seminar	Written/ Viva-voce/ Open book test	F&S	II	
Topic 8- Kesha, Danta, Nakha Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 6	Describe Panchabhautik Swaroop, Swabhav (Pitruja) with its applied value in Prakriti and also explain related diseases with importance of examination kesha, danta, nakha as diagnostic tool	Cognitive/ comprehensi on	MK	Knows how	Lecture with demonstration with 3D animated video/ SDL	Written/ Viva -voce/ Open book test/ Assignment	F&S	II	
Topic 9- Embryology [Time: Lecture: 07 hours, non-lecture 02 hours]									
CO 2	Define embryology and enlist its branches	Cognitive / knowledge / recall	DK	Knows	Lecture	Written/ viva-voce	F & S	I	
CO 2	Define Embryo and Foetus	Cognitive / knowledge / recall	MK	Knows	Lecture	Written/ viva-voce	F & S	I	

CO 2	Describe the anatomical structure of Sperm and Ovum and explain its clinical importance	Cognitive / comprehension	MK	Knows how	Lecture/ Demonstration	Written/ viva-voce/ Assignment	F & S	I	
CO 2	Define term of fertilization	Cognitive / knowledge / recall	MK	Knows	Lecture/ Seminar	Written/ viva-voce	F & S	I	
CO 2	Describe the process of cleavage	Cognitive / comprehension	MK	Knows how	Lecture/ Educational 3D Animated videos	Written/ viva-voce	F & S	I	--
CO 2	Explain the process of germ layer formation and its derivatives	Cognitive / comprehension	MK	Knows how	Lecture/ Educational 3D Animated videos	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Explain the laws of heredity	Cognitive / comprehension	MK	Knows how	Lecture/ Seminar	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe the process of sex determination and differentiation	Cognitive / comprehension	NK	Knows how	Lecture/ Seminar	Written/ viva-voce	F & S	I	--
CO 2	Explain the month wise development of Foetus	Cognitive / comprehension	MK	Knows how	Lecture/ Demonstration	Written/ viva-voce/ Open book test/ Project work	F & S	I	Dept. of Streerog Prasuti tan
CO 2	Explain foetal circulation and the changes in the circulation after birth	Cognitive / comprehension	MK	Knows how	Lecture/Demonstration	Written/ viva-voce	F & S	I	--
CO 2	Describe Placenta formation & its structure with applied anatomy	Cognitive / application	MK	Knows how	Lecture/ Seminar/ ECE	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra
CO 2	Describe Umbilical cord with clinical importance	Cognitive / knowledge / application	MK	Knows how	Lecture/ Seminar/ ECE	Written/ viva-voce	F & S	I	Dept. of Streerog Prasuti tantra

Topic 10- Osteology [Time: Lecture: 09 hours, non-lecture 06 hours] Practical- 20 hours									
CO3	Explain skeleton and its importance	Cognitive/ comprehension	MK	knows	Lecture/ Demonstration/ Seminar	Written / viva-voce	F & S	I	
CO3	Describe the uses of bones	Cognitive/ comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate the processes and depressions of various bones	Cognitive/ comprehension, Application	MK	Show how	Lecture / Demonstration	Written / viva-voce	F & S	I	
CO3	Describe the characteristics of the bones	Cognitive/ comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	I	
CO3	Describe the development and ossification of bones	Cognitive/ comprehension	DK	Knows how	Lecture	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate Cranial bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate Facial bones and its applied anatomy	Cognitive / comprehension, Application	DK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate pelvic bones and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate vertebral column and its applied anatomy	Cognitive / comprehension, Application	MK	Shows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO3	Describe and demonstrate thorax bones and its applied anatomy	Cognitive / comprehensi	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	

		on, Application							
CO3	Describe & demonstrate Clavicle and Scapula and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce	F & S	I	Kayachikitsa
CO3	Describe Phalanges, Carpal and Tarsal Bones and its applied anatomy	Cognitive / comprehension	DK	Knows	Lecture/ Demonstration	Written/ viva-voce	F & S	I	
CO3	Describe & demonstrate bones of the upper & lower extremity and its applied anatomy	Cognitive / comprehension, Application	MK	Shows how	Lecture/ Demonstration	Written / viva-voce/ Project work	F & S	I	
CO3	Describe & demonstrate Patella and its applied anatomy	Cognitive / comprehension, Application	DK	Shows	Lecture/ Demonstration	Written / viva-voce	F & S	I	
CO10	Recognize and describe the Radiological structures in radiograph	Cognitive / comprehension, Application	MK	Shows	Lecture/ Demonstration/ PBL/ ECE/ SDL	Written / viva-voce/ Project work/ Assignment	F & S	I	
Topic 11- Arthrology [Time: Lecture: 10 hours, non-lecture 06 hours] Practical- 8 hours									
CO 3	Recall the classification of Joints	Cognitive – Recall	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Demonstrate movements of Synovial Joints and comprehend the structural aspect helping in movements.	Cognitive – Application Psychomotor	MK	Knows how	Lecture/ Demonstration/ Simulation	Written/ viva-voce	F&S	II	
CO 3	Describe constitutional anatomy of joint	Cognitive – Comprehension	MK	Knows	Lecture	Written/ viva-voce	F&S	II	
CO 3	Describe joints of upper limb and lower limb region, TM joint, and its related applied aspect	Cognitive – Application	MK	Knows how	Lecture/ PBL/ ECE	Written/ viva-voce/ Open book test/ Assignment	F&S	II	Kaychikitsa

CO 3	Demonstrate the examination of synovial joints	Psychomotor	MK	Knows + Shows	Demonstration with case presentation in relative aspect/ ECE/ SDL/ 3D Animated videos	Written/ viva-voce/ Practical performance	F&S	II	Rognidan
Topic 12- Myology [Time: Lecture: 06 hours, non-lecture 02 hours] Practical- 8 hours									
CO5	State the types of muscles.	Cognitive – application Psychomotor	MK	Knows	Lecture	Written/ Viva-voce	F & S	II	
CO5	Describe and demonstrate the muscles of upper and lower extremity with their origin, insertion, action & nerve supply and applied aspect and its role in Yogasana	Cognitive – application	MK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/ 3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvrit ta
CO5	Describe and demonstrate muscles of thorax and abdomen with their origin, insertion, action & nerve supply and applied aspect and its role in Yogasana	Psychomotor	MK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/ 3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvrit ta
CO5	Describe and demonstrate muscles of back with origin, insertion, action & nerve supply and applied aspect and role in Yogasana	Cognitive – application	DK	Shows	Lecture/ Demonstration/ GD/TT/ SDL/3D Animated videos	Written/ Viva-voce/ Open book test/ Project work	F & S	II	Swasthvri tta
Topic 13- Nervous System [Time: Lecture: 14 hours, non-lecture 04 hours] Practical- 12 hours									
CO6	Explain the hierarchy of structural unit	Cognitive-/ comprehensi on	MK	Knows	Lecture/ Demonstration	Written/ viva-voce	F&S	III	
CO6	Describe the functional and structural division of the nervous system	Cognitive-comprehensi on	MK	Knows how	Lecture/ Seminar	Written/ viva-voce	F&S	III	

CO6	Explain the parts of Brain (Cerebrum, Cerebellum)	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe external and internal features of Spinal cord.	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Illustrate the Blood supply of Brain and Spinal cord.	Cognitive – comprehension	MK	Knows, Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the external features of diencephalon Mid brain, Pons, Medulla oblongata.	Cognitive-Comprehension	DK	Knows	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the limbic system	Cognitive-Comprehension	NK	Knows	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the general Sulci and gyri of cerebrum and determine the clinical importance of Broadman's classification	Cognitive – application	MK	Knows Knows how	Lecture/ Demonstration/ 3D animated videos	Written/ viva-voce/ Open book test	F&S	III	
CO6	Describe the ascending, descending pathways, upper motor neurons and lower motor neurons, its applied aspect in examination of nervous system	Cognitive/ application Affective /responding	DK	Knows how	Lecture/ Demonstration/ CBL, ECE	Written/ viva-voce/ Open book test	F&S	III	Kaya chikitsa
CO6	Demonstrate the superficial and deep reflexes and its clinical importance	Cognitive /application Psychomotor /perception Affective /responding	DK	shows	Lecture + Demonstration though living object/ ECE/ PBL/ SDL/ CBL	Viva-Voce/ Practical performance	F&S	III	Kayachi kitsa

CO6	Recall the general anatomical consideration of ANS	Cognitive/ Recall	MK	Knows	Lecture/ SDL	Written	F&S	III	
CO6	Describe the cranial and spinal nerves along with formation of nerve plexuses and applied anatomy	Cognitive / Application	DK	Knows how	Lecture/ PBL/ ECE/ SDL	Written / viva-voce/ Assignment	F &S	III	
CO6	Describe the Formation and circulation of cerebro- spinal fluid	Cognitive/ comprehensi on	MK	Knows how	Lecture	Written / viva-voce	F&S	III	
Topic 14- Endocrinology [Time: Lecture: 08 hours, non-lecture 03 hours] Practical- 02 hours									
CO 6	Define Endocrine Glands and enlist them	Cognitive/ Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe Structure and Functions of Endocrine Glands	Cognitive-/ Comprehensi on	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	State the location, Dimension & Shape of Pituitary	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Parts & subdivisions of Pituitary	Cognitive / comprehensi on	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Pituitary	Cognitive /comprehensi on	MK	Knows	Lecture/ Demonstration/ CBL	Written / viva-voce	F & S	III	
CO 6	Enlist the hormones secreted by Pituitary, & histology and discuss its clinical anatomy.	Cognitive/ Application	MK	Knows	Lecture/ Demonstration/ GD	Written / viva-voce/ Open book test	F & S	III	
CO 6	State the location, Dimension & Shape of Thyroid gland	Cognitive/Re call	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the lobes, border & surfaces of Thyroid gland with its relation.	Cognitive /comprehensi on	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the blood supply, nerve Supply & lymphatic drainage of Thyroid gland	Cognitive /comprehensi on	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	

CO 6	List the Hormones secreted by Thyroid gland and & histology, and discuss its clinical application	Cognitive - Application	MK	Knows	Lecture/ GD/ CBL	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe the location, Shape, Dimensions and structure of Parathyroid gland	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Parathyroid gland	Cognitive /comprehension	DK	Knows	Lecture Demonstration	Written / viva-voce	F & S	III	
CO 6	List the hormones secreted by parathyroid, & histology and discuss its Clinical anatomy	Cognitive /Application	DK	Knows	Lecture/ GD/ CBL	Written / viva-voce/ Open book test	F & S	III	Kayachikitsa
CO 6	State the location, Shape & dimension of Suprarenal gland	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Surface, Borders of Suprarenal gland along with its relation.	Cognitive/comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	List the Functions and Secretions of Suprarenal gland	Cognitive /Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	Sharir Kriya
CO 6	Describe the Blood Supply, Nerve Supply & Lymphatic drainage of Suprarenal gland	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Describe the Internal structure of suprarenal gland	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	III	
CO 6	Write the Clinical & applied anatomy & histology of Suprarenal gland	Cognitive /application	DK	Knows	Lecture/ CBL	Written / viva-voce/ Open book test	F & S	III	Kayachikitsa
Topic 7- Lymphatic System [Time: Lecture: 02 hours, non-lecture 02 hours]									

CO 6	Define Lymphatic System	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe components of Lymphatic System	Cognitive / comprehension	MK	Knows	Lecture	Written / viva-voce	F & S	III	
CO 6	Describe the anatomical structure of Various Lymph Vessels i.e. Lymphatic Trunks, Thoracic Duct etc and explain its clinical importance	Cognitive / comprehension, Application	MK	Knows how	Lecture/ Demonstration/ CBL	Written / viva-voce	F & S	III	
CO 6	Describe the anatomical structure of Lymph Glands i.e. Lymph Nodes, Spleen, Thymus, Tonsils etc and explain its clinical importance	Cognitive / comprehension, Application	MK	Knows how	Lecture/ Demonstration/ ECE/ CBL	Written / viva-voce/ Open book test	F & S	III	Rognidan Evum Vikriti Vigyan
Paper II									
Topic 1- Praman sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Describe Anguli and Anjali praman with its significance.	Cognitive Comprehension	MK	Knows	Lecture/ Demonstration/ GD	Written/ Viva-voce/ Open book test	F & S	II	
Topic 2- Koshtha Evam Ashaya Shaarira [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO1	Define of Koshtha and Ashaya	Cognitive/ knowledge	MK	Knows	Lecture	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe the concept of various numbers of Koshthanga as per Samhitas	Cognitive/ Comprehensive	MK	Knows	Lecture	Written/ viva-voce/ Open book test	F&S	I	
CO1	Describe the concept of various Numbers of Ashaya as per Samhitas	Cognitive/ Comprehensive	MK	Knows	Lecture/ TT/ GD	Written/ viva-voce/	F&S	I	

						Open book test			
CO1	Describe and explain applied aspects of Koshtha and Ashaya.	Cognitive/ Comprehensive application	NK	Knows How	Lecture/ GD/ ECE	Written/ viva-voce/ Assignments/ Open book test	F&S	I	Kayackitsa
Topic 3- Sira sharir [Time: Lecture: 03 hours, non-lecture 01 hours]									
CO 4	Define Sira, Enumerate the sira & state its Nirukti	Cognitive /Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the classification of Sira	Cognitive / Comprehension	MK	Knows how	Lecture	Written / viva-voce/ Open book test	F & S	II	
CO 4	Define Vedhya Sira and Enumerate Vedhya Sira	Cognitive /Recall	MK	Knows	Lecture/ GD	viva-voce/ Open book test	F & S	II	
CO 4	Define Avedhya sira and Enumerate the Avedhya Sira	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce/ Open book test	F & S	II	
CO 4	Locate the Vedhya Sira in the body according to region	Cognitive / application Psychomotor	MK	Shows	Lecture/ Demonstration/ IT	viva-voce/ Practical performance	F & S	II	Shalyatantra
CO 4	Describe the applied aspect of Siravedha	Cognitive - application	DK	Knows how	Lecture/ ECE/ IT/ CBL	Written / viva-voce/ Assignment / Open book test	F & S	II	Shalyatantra
Topic 4- Dhamani Sharir [Time: Lecture: 02 hours, non-lecture 01 hours]									
CO 4	Define Dhamani, and state its Nirukti	Cognitive/ Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	

CO 4	Explain the classification of Dhamani	Cognitive/ Comprehension	MK	Knows how	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Locate the Dhamani in the body according to region	Cognitive / application Psychomotor	DK	Shows	Lecture/ Demonstration	Viva-voce/ Practical performance	F & S	II	
Topic 5- Srotasa Sharir [Time: Lecture: 08 hours, non-lecture 03 hours]									
CO 4	Define Srotasa and state its Nirukti and types	Cognitive/ Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	Explain the Classification of Srotasa	Cognitive / Comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	II	
CO 4	State the Moolsthana of all Srotasa as per Acharya Sushrut and Charak and its clinical aspect	Cognitive / Recall	MK	Knows how	Lecture/ Seminar/ ECE	Written / viva-voce/ Assignment/ Open book test	F & S	II	Kayachikitsa/ Panchakarma
Topic 6- Kala Sharir [Time: Lecture:02 hours, non-lecture 02 hours] Practical- 03 hours									
CO1	Define Kala and explain the formation & functions of seven Kala	Cognitive –/ comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F&S	III	
CO1	Describe Saptakalas with its applied aspect	Cognitive /comprehension +application	MK	Knows	Lecture/ demonstration/ ECE	Written / viva-voce/ Open book test	F&S	III	Agadtantra
CO1	Relate the Sapta Kala with Sapta Dhatu	Cognitive – application + affective - awareness	NK	Knows how	Lecture/ Seminar/ IT	Written / viva-voce	F&S	III	
Topic 7- Indriya Sharir [Time: Lecture: 03 hours, non-lecture 01 hours]									

CO 7	Define Indriya. Interpret derivation of Indriya and explain its importance.	Cognitive / comprehension	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	State the meaning of Indriya-artha and Indriya- adhishthan	Cognitive / knowledge	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	Enlist Dnyanendriyas, Karmendriyas and Ubhayendriya	Cognitive / knowledge	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 7	Illustrate classical description of Dnyanendriya Adhishthan – Karna, Twak, Netra, Jivha, Nasa with its clinical perspective	Cognitive / application	MK	Knows how	Lecture/ IT/ ECE/ PBL	Written / viva-voce/ Open book test/ Assignment	F & S	III	Dept. of Shalaky atantra
Topic 8- Twacha Sharir [Time: Lecture: 02 hours, non-lecture 02 hours]									
CO 7	DefineTwacha, its types and characteristics with its clinical importance, significance of twacha adhisthana in disease manifestation, its relation with dhatu	Cognitive/ comprehension	MK	Knows how	Lecture with demonstration with 3D animated video/ ECE/ SDL	Written/ Viva -voce/ Open book test	F&S	III	
Topic 9- Marma Sharir [Time: Lecture: 13 hours, non-lecture 04 hours] Practical- 12 hours									
CO 5	Define Marma and enumerate the Marmas	Cognitive – Recall	MK	Knows	Lecture/ Seminar	Written / viva-voce/ Open book test	F&S	II	
CO 5	Describe the Marma and Prana tatva with its Significance	Cognitive – Comprehension	MK	Knows	Lecture	Written / viva-voce/ Open book test	F&S	II	

CO 5	Discuss the classification of Marma	Cognitive – Comprehension	MK	Knows	Lecture/ ECE/ PBL	Written / viva-voce/ Open book test	F&S	II	
CO 5	Narrate the importance of marma in Sharir and Shalya vigyan	Cognitive – application	MK	Knows how	Lecture/ ECE/ PBL	Written/ Open book test	F&S	II	Shalyat antra
CO 5	Illustrate the specific location of Marma as per Sushruta Samhita	Cognitive – Comprehension	MK	Knows + Shows	Lecture/ Demonstration/ Workshop	Written / viva-voce/ Open book test	F&S	II	
CO 5	Demonstrate the Marma location as per modern anatomy	Cognitive – Application Psychomotor	MK	Knows + Shows	Lecture with 3D animated demonstration/ Seminar/ Workshop	Viva-voce/ Practical performance	F&S	II	Panchakarma
Topic 10- Respiratory system [Time: Lecture: 06 hours, non-lecture 04 hours] Practical- 10 hours									
CO6	Enlist the parts of the Bronchial tree	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	State the location and dimension of Lungs	Cognitive - Knowledge	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Differentiate between Right and left Lungs	Cognitive -/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the Borders, Surfaces and lobes of the Lungs	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Explain the root of Lungs	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Bronchopulmonary segments of the lungs	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the Blood supply, Nerve supply, Lymphatics of the Lungs	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	

CO6	Describe histology and Clinical Anatomy of Lungs	Cognitive / application	MK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Kaychikita
CO6	State the extent and features of Trachea	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Relations of Trachea	Cognitive – /comprehension	MK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Describe the Blood supply, Nerve supply and Lymphatics of Trachea	Cognitive /comprehension	MK	Knows how	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the histology and Clinical anatomy of Trachea	Cognitive /Application	MK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Shalakyatantra
CO6	State the extent of Larynx and its external features	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Enlist the paired and unpaired cartilages of Larynx	Cognitive / Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the relations of Larynx	Cognitive /comprehension	DK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test	F & S	II	
CO6	Write the blood supply, nerve supply and lymphatics of Larynx	Cognitive /comprehension	DK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the histology and clinical anatomy of Larynx	Cognitive / application	DK	Knows how	Lecture/ Demonstration	Written / viva-voce/ Assignment	F & S	II	
CO6	State the location of Pleura and enlist its parts	Cognitive/ Recall	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Describe the parts of parietal Pleura	Cognitive/ comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce	F & S	II	
CO6	Explain the Pulmonary ligaments and recesses of Pleura	Cognitive /comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/	F & S	II	

						Open book test			
CO6	Describe the blood supply, nerve supply, lymphatics of Pleura	Cognitive /comprehension	DK	Knows how	Lecture	Written / viva-voce	F & S	II	
CO6	Explain the clinical anatomy of Pleura	Cognitive – Application	DK	Knows how	Lecture/ ECE/ PBL	Written / viva-voce/ Assignment	F & S	II	Kayachi kitsa
Topic 11- Digestive system [Time: Lecture: 10 hours, non-lecture 06 hours] Practical- 22 hours									
CO 6	Describe peritoneum and nine parts of abdomen	Cognitive – application	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy of the Oesophagus with relations, histology and clinical anatomy	Cognitive – application	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Stomach, Stomach bed, the interior, histology, blood supply with relations and clinical anatomy	Cognitive – application	MK	Knows	Lecture/ Demonstration/ PBL/ ECE/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Duodenum with relations, histology and clinical anatomy.	Cognitive – application	MK	Knows	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the parts, structure, histology and clinical anatomy of Large intestine.	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the anatomy of the Rectum, Peritoneal &	Cognitive – application	MK	Knows how	Lecture/	Written/	F & S	I	

	visceral relations and applied anatomy of the Rectum.				Demonstration/ ECE/ PBL/ IT	Viva-voce/ Open book test/ Assignment			
CO 6	Describe the anatomy and musculature of the anal canal, histology with its blood supply, venous drainage and applied anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure of the Pancreas, Pancreatic ducts, applied anatomy, along with histology of endocrine & exocrine part.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe external features, anatomy histology and clinical anatomy of Liver	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Describe the structure, peritoneal & visceral relations histology and applied anatomy of the Spleen.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
CO 6	Enlist the salivary glands and describe the anatomy of Parotid gland, Submandibular gland and Sublingual gland with its & Clinical anatomy	Cognitive – application	DK	Knows how	Lecture/ Demonstration	Written/ Viva-voce/ Open book test/ Assignment	F & S	I	
Topic 12- Cardiovascular System [Time: Lecture: 08 hours, non-lecture 03 hours]									
CO 6	Describe pericardium with its clinical anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration	Written/ Viva-voce	F & S	II	
CO 6	Describe external features of the Heart.	Cognitive – recall	MK	Knows	Lecture/ Demonstration	Written/	F & S	II	

						Viva-voce/ Open book test/ Assignment			
CO 6	Describe internal features of the chambers, valve and auscultatory areas of Heart and its applied anatomy	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Describe the major arteries and veins of Heart.	Cognitive – Recall	MK	Knows	Lecture/ Demonstration	Written/ Viva-voce	F & S	II	
CO 6	Describe the histology and applied anatomy of Heart.	Cognitive – application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written/ Viva-voce/ Open book test/ Assignment	F & S	II	
Topic 13- Urinary System [Time: Lecture: 08 hours, non-lecture 03 hours] Practical- 04 hours									
CO 6	Enlist the components of Urinary System	Cognitive / Recall	MK	Knows	Lecture	Written / viva-voce	F & S	II	
CO 6	Describe the anatomical structure of Kidney, Ureter, Urinary bladder, Urethra	Cognitive / Comprehension	MK	Knows	Lecture/ Demonstration	Written / viva-voce/ Open book test/ Assignment	F & S	II	Kayachikitsa /Panchkarma/Shalaya-Tantra
CO 6	Explain histology and clinical anatomy of Kidney, Ureter, Urinary bladder, Urethra and its importance	Cognitive / Comprehension & Application	MK	Knows how	Lecture/ Demonstration/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F & S	II	
CO 6	Enlist developmental anomalies of Kidney, Ureter, Urinary bladder, Urethra	Cognitive / Recall	NK	Knows	Lecture	Written / viva-voce/ Open book test/ Assignment	F & S	II	
Topic 14- Reproductive System [Time: Lecture: 07 hours, non-lecture 03 hours] Practical-02 hour									

CO 6	Enlist the anatomical structures of male reproductive system and discuss its Ayurved Sharir	Cognitive / Comprehension	MK	knows how	Lecture	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe the male reproductive organs – Testes, Scrotum, Epididymis, Ductus deference, Ejaculatory duct, penis, Spermatic cord with histology and applied aspect	Cognitive / application	MK	knows how	Lecture	Written / viva-voce/ Open book test	F & S	III	
CO 6	Enlist the anatomical structures of female reproductive system and discuss its Ayurved Sharir.	Cognitive / Comprehension	MK	knows how	Lecture/ Seminar	Written / viva-voce/ Open book test	F & S	III	
CO 6	Describe external female reproductive organs	Cognitive / Comprehension	MK	knows	Lecture/ Seminar	Written / viva-voce	F & S	III	
CO 6	Explain Internal reproductive organs in detail with histology and its applied anatomy (Uterus, Fallopian tube, Cervix, Vagina, Ovary)	Cognitive / application	MK	knows how	Lecture/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F & S	III	
CO 6	Explain histology of Uterus, Fallopian tube, Cervix, Vagina, Ovary	Cognitive / application	DK	knows how	Lecture/ Demonstration	Written / viva-voce/ Open book test/ Assignment	F & S	III	
Topic 15- Sensory organ [Time: Lecture: 14 hours, non-lecture 05 hours]									
CO7	Explain five sensory receptors, hierarchy of development of five senses and need of five senses	Cognitive - comprehension	MK	Knows how	Lecture with 3D animated demonstration	Written / viva-voce/ Open book test/ Assignment	F&S	III	
CO7	Describe structural aspect of five sensory organ	Cognitive – comprehension	MK	Knows	Lecture	Written / viva-voce/ Open book	F&S	III	

						test/ Assignment			
CO7	Describe the pathways of each sense in understanding of its functional anatomy	Cognitive - comprehension	NK	Knows how	Lecture with 3D animated demonstration/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F&S	III	
CO7	Determine Method of examination, tool of examination and Importance of sensory organ in systemic examination	Cognitive - comprehension + Psychomotor	DK	Knows + Shows	Lecture with practical demonstration of tools/ ECE/ PBL/ IT	Written / viva-voce/ Open book test/ Assignment	F&S	III	Shalakya dept. Kaya chikitsa dept

***MK-Must Know, DK- Desirable to Know, NK- Nice to Know, TT- Tutorial, GD- Group Discussion, PBL- Problem Based Learning, IT- Integrated Teaching, ECE- Early Clinical Exposure, SDL- Self Directed Learning, CBL- Case Base Learning (P)- Practical**

List of Practicals AyUG-RS

Marks: 200

Hours: 240

SN	Name of Practical	Term	Hours
P1	• Branches of anatomy. History of Anatomy • Ethics in dissection hall	I	2
P2	Anatomical Terminologies Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves.	I	4
P3	Preservation methods of the cadaver, Mrut sharir Samshodhan • Different methods of preservation techniques. Brief introduction of chemical composition of preservative fluid.	I	2
P4	Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960	I	2
P5	Shava vichhedana – detailed dissection of the whole body • Line of incision • Dissection technique • Identification of different tools and its Uses • Identification and characteristics of Different layers and its relation	I	32
	In Extremities: Dissection of extremities & Identification of related structures	II	40
	In Trunk region: Demonstration of visceral relation of thoracic, abdominal and pelvic organ	II	38
	In Head Region: Dissection of head, Identification of Meninges, Major Sulci and gyri, Superficial origin of Cranial Nerve and and venous Sinus.	III	14
	Dissection of sensory organs	III	22
P6	• Practical study of vital organs, Histological slides • Identification of external features of thoracic, abdominal and pelvic viscera	II	06
P7	Practical study of bones	I	36

	Identification of external features of bones and different attachment		
	Surface and Radiological anatomy **In Radiology Anatomy**: Characteristics of radio imaging film and detailing about its color contrasting Identification of Normal alignment of bodily structure – X ray film a. Chest X Ray – A.P And P.A view b. Detailing of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint. c. Identification of basic clinical finding through X ray film related to long bones and joints	III	22
P8	**In Surface Anatomy Section:** • Identification of Underlying viscera of Nine region based upon Cadaveric and Living Anatomy • Surface marking of thoracic, abdominal and pelvic viscera	III	6
P9	Practical study of Marma Surface markings of all Marma points and its anatomical demarcation.	III	12
P10	Brief detailing about body donation, organ donation and its awareness (Communication skills)	III	2

***Note: one practical should not be less than 2 hrs.**

Table 4: Learning objectives (Practical) of AyUG- RS

A4 Course outcome	B4 Learning Objective (At the end of the session, the students should be able to)	C4 Domain/sub	D4 Must to know/ desirable to know/Nice to know	E4 Level Does/ Shows how/ Knows how/ Know	F4 T-L method	G4 Assessment	H4 Formative /summative	I4 Term	J4 Integration
Practical 1- Definition and branches of anatomy. History of Anatomy [Time: Practical or other activity - 02 hours]									
CO1	Define and describe branches of anatomy and its history	Cognitive / knowledge / recall	MK	Know	Lecture/ Tutorial	Written +viva-voce	F&S	I	
CO9	Practice of ethics in the context of human dissection	Cognitive / knowledge / recall/ Affective/ psychomotor	MK	Knows Shows	Tutorial/ Demonstration	viva-voce	F&S	I	
Practical 2- Anatomical Terminologies [Time: Practical- 2 hours and other activity 2 hours]									
CO1	Demonstrate anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves.	Cognitive / knowledge / recall	MK	Knows	Tutorial/ Demonstration/ Simulation	Written +viva-voce/ Open book test/ Assignments	F&S	I	

Practical 3- Preservation methods of the cadaver, Mrut sharir Samshodhan [Time: Practical or other activity - 02 hours]									
CO9	Describe and demonstrate preservation methods of the cadaver and Mrut sharir Samshodhan	Cognitive / knowledge / recall	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce	F&S	I	
CO9	Describe the different methods of preservation techniques and give brief introduction of chemical composition of preservative fluid.	Cognitive / knowledge / recall	MK	Knows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE	F&S	I	
Practical 4- Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960 [Time: Practical or other activity - 02 hours]									
CO9	Describe and follow the Anatomy Act and Bio medical waste management act 1960	Cognitive - comprehension, Affective/ psychomotor	NK	Knows, know how, Shows	Lecture/ Tutorial/ Demonstration	Written +viva-voce/ Practical performance/ Public awareness	F&S	I	
Practical 5- Shava vichhedana – detailed dissection of the whole body [Time: Practical- 126 hours and other activity 20 hours]									
CO9	Demonstrate the line of incision, dissection technique, different tools and their uses	Cognitive / knowledge / recall	MK	Knows/ Shows/ Shows How	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce, spotting, OSPE	F&S	I	
CO9	Identify and characteristics of Different layers and its relation	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration / Simulations /	Written +viva-voce, spotting, OSPE	F&S	I	

					Cadaveric dissection				
CO9	Identify and demonstrate muscles of extremities and its related structures	Cognitive / knowledge / recall	DK	Knows, Shows	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce	F&S	II	
CO6	Describe and demonstrate the visceral relation of thoracic and abdominal organ	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Demonstration / Simulations / Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	II	
CO6	Describe and demonstrate surface identification of parts of brain, major sulci and gyri, superficial origin of cranial nerve and meninges and venous sinus.	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations/ Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO6	Describe, dissect and demonstrate the sensory organs	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations/ Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
Practical 6- Practical study of vital organs, Histological slides and identification of external features of thoracic and abdominal viscera [Time: Practical- 04 hours and other activity 02 hours]									
CO6	Focus the histological slides of identified organs	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration	Written +viva-voce spotting, OSPE	F&S	II	
CO6	Describe and demonstrate the	Cognitive - comprehension +	MK	Knows Shows	Demonstration	Written +viva-voce, spotting,	F&S	II	

	external features of thoracic and abdominal viscera	psychomotor				OSPE/ Practical performance			
Practical 7- Practical study of bones [Time: Practical- 30 hours or other activity 06 hours]									
CO3	Describe and demonstrate external features of bones and muscle attachments	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Demonstration / Simulations	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	I	
CO10	Describe the characteristics of radio imaging film and difference in color contrasting	Cognitive / knowledge / recall	DK	Knows	Tutorial/ Demonstration / Simulations	Written +viva-voce spotting, OSPE	F&S	I	
Practical 8- Surface and Radiological anatomy [Time: Practical- 20 hours and other activity 08 hours]									
CO10	Describe and demonstrate the normal alignment of chest X Ray – A.P And P.A view	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO10	Describe and demonstrate the normal alignment of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint	Cognitive - comprehension + psychomotor	MK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO10	Identify the basic clinical finding through X ray film	Cognitive - comprehension +	NK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/	F&S	III	Kaychikitas, Shalyatantra

	related to long bones and joints	Psychomotor				Practical performance			
CO8	Describe and demonstrate underlying viscera of Nine region based upon cadaveric and Living Anatomy	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
CO8	Describe and demonstrate surface marking of thoracic and abdominal viscera	Cognitive - comprehension + psychomotor	DK	Knows, Shows	Tutorial/ Demonstration	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	
Practical 9- Practical study of Marma [Time: Practical or other activity - 12 hours]									
CO5, CO8	Describe and demonstrate surface markings of Marma points and its anatomical demarcation of all Marma as per Shadang sharir	Cognitive - comprehension + psychomotor	MK	Knows + Shows	Tutorial/ Demonstration / Cadaveric dissection	Written +viva-voce, spotting, OSPE/ Practical performance	F&S	III	Panchakarma
Practical 10- Body donation, organ donation and its awareness [Time: Practical or other activity - 02 hours]									
CO9	Describe body donation and organ donation process with respect to specific organ and its awareness Demonstrate process of communication	Affective/ psychomotor Psychomotoe	DK MK	Knows, know how, Shows	Tutorial/ Demonstration Role Play	Written +viva-voce/ Public awareness/ social work	F&S	III III	Shalyatantra and Shalakyatantra

	process in awareness speech or cousellinf for Body donation.								

Table 5: Non-Lecture Activities Course AyUG-RS

1	List non lecture Teaching-Learning methods	No of Activities (Values in hours)
a	Seminar / Workshop	14
b	Tutorial (TT) / Group Discussion (GD)	14
c	Problem based learning (PBL)	8
d	Integrated teaching (IT)	8
e	Early Clinical Exposure (ECE)/ Case Base Learning (CBL)	18
f	Self-Directed Learning (SDL) / Summary writing	12
g	Field visit	6
		80
2	**Practical (refer Table 4)**	**240**
	Total	**320**

Other Educational Activities(Additional):

- Field visit (community/anatomy museum) - II & III term
- Practical journal – II & III term
- Summary/ Essay writing (Research papers/Samhitas literature review)- II or III term

Table 6: Assessment Summary

6 A - Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	**AyUG-RS**	2	200	100	70	-	30	200	400

6 B - Scheme of Assessment (formative and Summative) AyUG-RS

SR.NO.	PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First	3 PA & First TT	3 PA & Second TT	3 PA & UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

6 C - Calculation Method for Internal assessment Marks (30 Marks) AyUG-RS

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) [MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)] and Practical (100 Marks) Then convert to 30 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods for Periodical Assessment
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Other activities explained in Table 3 Column G3 as per indicated term and objective of the topic.

6 E - Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-RS

PAPER-1

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-RS

PAPER-1I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F – I - Distribution of Theory exam AyUG- RS

	Paper I				D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A List of Topics		B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Shariropkramaniya Shaarira		I	Refer Next table	Yes	Yes	No
2	Paribhasha Shaarira		I		Yes	Yes	No
3.	Garbha Shaarira		I		Yes	Yes	Yes
4.	Asthi Shaarira		I		Yes	Yes	Yes
5.	Sandhi Shaarira		II		Yes	Yes	Yes
6.	Snayu sharir		II		Yes	Yes	No
7.	Peshi Shaarira		II		Yes	Yes	No
8.	Kesha, Danta, Nakha Sharir		II		Yes	Yes	No
9	Embryology		I		Yes	Yes	Yes
10	Osteology		I		Yes	Yes	Yes
11	Arthrology.		II		Yes	Yes	Yes
12	Myology		II		Yes	Yes	No
13	Nervous System.		III		Yes	Yes	Yes
14	Endocrinology		III		Yes	Yes	Yes
15	Lymphatic system		III		Yes	No	Yes

	Paper II			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A List of Topics	B Term	C Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	Pramana Shaarira:	II	Refer Next Table	Yes	No	No
2	Koshtha Evam Ashaya Shaarira	I		Yes	Yes	Yes
3.	Sira Sharir	II		Yes	Yes	Yes
4.	Dhamani Sharir	II		Yes	Yes	Yes
5.	Strotas Shaarira	II		Yes	Yes	Yes
6.	Kalaa Shaarira	III		Yes	Yes	Yes
7.	Indriya Shaarira	III		Yes	Yes	Yes
8.	Twacha Sharir	III		Yes	Yes	Yes
9	Marma Shaarira	II		Yes	Yes	Yes
10	Respiratory System	II		Yes	Yes	Yes

11	**Digestive system**	**I**		**Yes**	**Yes**	**Yes**
12	**Cardiovascular system**	**II**		**Yes**	**Yes**	**Yes**
13	**Urinary System**	**II**		**Yes**	**Yes**	**Yes**
14	**Reproductive system**	**III**		**Yes**	**Yes**	**Yes**
15	**Sensory organs**	**III**		**Yes**	**Yes**	**Yes**

6 F – II - Theme table

Paper-I:

Theme*	Topics	Term	Marks	MCQ	SAQ	LAQ
a	1) Shariropakramaniya 2) Paribhasha Sharir	I	10	YES	YES	NO
b	3) Garbha Sharir 9) Embryology	I	20	YES	YES	YES
c	4) Asthi Sharir 10) Osteology	I	16	YES	YES	YES
d	8) Kesh, Dant, Nakha Sharir 7) Peshi Sharir 12) Myology	II	11	YES	YES	NO
e	5) Sandhi Sharir 6) Shayu Sharir 11) Arthrology	II	17	YES	YES	YES
f	13) Nervous System	III	14	YES	YES	YES
g	14) Endocrinology 15) Lymphatic	III	12	YES	YES	YES
*Theme: is group of similar topics in Ayurved Sharir and Anatomy. Used in 6G question paper blue print						

Paper-II

Theme	Topics	Term	Marks	MCQ	SAQ	LAQ
a	2) Koshta Evam Ashay Sharir 11) Digestive system	I	16	YES	YES	YES
b	1) Praman Sharir 9) Marma Sharir	II	17	YES	YES	YES
c	3) Sira Sharir 4) Dhamani Sharir 5) Strotas Sharir 12) Cardiovascular System	II	21	YES	YES	YES
d	10) Respiratory System	II	10	YES	YES	YES
e	13) Urinary System	II	10	YES	YES	YES
f	14) Reproductive System	III	6	YES	YES	NO
g	6) Kala Shair 7) Indriya Sharir 8) Twacha Sharir 15) Sensory organs	III	20	YES	YES	YES

6 G Question paper Blue print for AyU-RS:
PAPER-I

A Question Sr. No	B Type of Question	C Question Paper Format **(Refer table 6 F II Theme table for themes)**
Q1	**Multiple choice Questions** **(MCQ)** 20 Questions 1 mark each All compulsory **Must know part: 15 MCQ** **Desirable to know: 3 MCQ.** **Nice to know: 2 MCQ**	1. Theme a 2. Theme a 3. Theme a 4. Theme a 5. Theme a 6. Theme b 7. Theme b 8. Theme b 9. Theme b 10. Theme b 11. Theme c 12. Theme d 13. Theme e 14. Theme e 15. Theme f 16. Theme f 17. Theme f 18. Theme f 19. Theme g 20. Theme g
Q2	**Short answer Questions** **(SAQ)** Eight Questions 5 Marks Each All compulsory **Must know part: 7 SAQ** **Desirable to know: 1 SAQ** **Nice to know: Nil**	1. Theme a 2. Theme b 3. Theme c 4. Theme d 5. Theme d 6. Theme e 7. Theme g/f 8. Theme g/f
Q3	**Long answer Questions** **(LAQ)** Four Questions 10 marks each All compulsory **All questions on must know** **No Questions on Nice to know and Desirable to know**	1. Theme b 2. Theme c 3. Theme e 4. Theme f/g

PAPER-II

Question Sr. No		**SET**
Q1	**Multiple choice Questions (MCQ)** 20 Questions 1 mark each All compulsory **Must know part: 15 MCQ** **Desirable to know: 3 MCQ.** **Nice to know: 2 MCQ**	1. Theme a 2. Theme b 3. Theme b 4. Theme c 5. Theme c 6. Theme c 7. Theme c 8. Theme c 9. Theme c 10. Theme d/e 11. Theme d/e 12. Theme d/e 13. Theme e/d 14. Theme e/d 15. Theme f 16. Theme g 17. Theme g 18. Theme g 19. Theme g 20. Theme g
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory **Must know part: 7 SAQ** **Desirable to know: 1 SAQ** **Nice to know: Nil**	1. Theme a 2. Theme b 3. Theme c 4. Theme d/e 5. Theme e/d 6. Theme e/d 7. Theme f 8. Theme g
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory **All questions on Must to know** **No Questions on Nice to know and Desirable to know**	1. Theme a 2. Theme b 3. Theme c 4. Theme g

6 H - I - Distribution of Practical Exam

Practical 100 Marks + (Viva 70 + IA 30) Marks

SN	Heads	Marks
1	Spotting (Refer Table 6 H II below)	**20**
3	Kostha Ashay Sharir, Dissected organs and histology slides	**20**
4	Ashti, Sandhi, Peshi, Bones and Joints,	**20**
5	Marma Sharir, Surface & Radiological anatomy	**20**
6	Practical record (15 Marks) and Communication Skill (5 Marks)	**20**
7	Viva-Voce (Objective Structured) (Refer table 6 H – III)	**70**
8	Internal assessment	**30**
	Total Marks	**200**

6 H - II Practical Spot examination Questions – (20 marks)

SN	Question	Mark allotment
Topic- Garbha/Sira/Kala		
1	Identify the structure & give the Drushtant/ Metaphor related with it. e.g.- Gunja Phala- Artava, Spatik-Shukra, etc	Identification- 1 Drushtant- 1
Topic- Marma		
1	Identify the Marma & write its type as per Parinama & Rachana	Identification- 1 Type-1
2	Identify the Marma & write its Pariman & any two anatomical structures related to the Marma	Identification- 0.5 Pariman – 0.5 Anatomical structure - 1
3	Identify the Marma & write its applied aspect	Identification- 1 Viddha-1
Topic- Bones, Muscles		
1	Identify the bone & write its peculiarities (Any 2) e.g.- Atlas vertebra	Identification- 0.5 Peculiarities- 1.5
2	Identify the indicated part on the bone & write its attachment (Any 2) e.g., Scapula spine	Identification- 1 Attachment- 1
3	Identify the side of the given bone & write side determination points	Side identification- 0.5 Points- 1.5
4	Identify the side of the given bone & write its applied anatomy (Any 2 points)	Identification-1 Applied -1
5	Write the type of the given bone as per Ayurved & Modern science e.g., Tibia- Nalakasthi, long bone	Ayu. Type- 1 Modern type- 1
6	Identify the indicated muscle on the bone & write whether it originates or inserts there	Muscle identification- 1 Origin/insertion- 1
7	Identify the indicated muscle & write its action (Any 2)	Identification- 1 Action-1
8	Identify the indicated muscle& write its blood supply/nerve supply	Identification-1

		Supply-1
9	Identify the indicated muscle& write its applied anatomy	Identification-1 Applied -1
10	Identify the bone and write any two processes	Identification-1 Processes -1
11	Identify the bone and write any two angles	Identification-1 Angle -1
12	Identify the bone and write any one peculiarity related to gender e.g., Hip bone, Clavicle, Sacrum	Identification-1 Peculiarities- 1
Topic- Joints		
1	Identify the joint & write its ligaments (Any 3)	Identification- 0.5 Ligaments- 1.5
2	Identify the joint & write names of actions occurring there (Any 3)	Identification- 0.5 Actions- 1.5
3	Identify the joint & write the type of joint as per Ayurved & Modern science	Identification- 1 Ayu. Type- 0.5 Modern type- 0.5
4	Identify the joint & write its clinical anatomy (Any two)	Identification- 1 Clinical anatomy-1
5	Identify the joint & write its relation (Any two)	Identification- 1 Relation -1
6	Identify the joint & write the movements along with the muscle	Identification- 1 Movement -0.5 Muscle – 0.5
Topic- Organs		
1	Identify the organ & write name of the Srotas related to it	Identification- 1 Sroras-1
2	Identify the organ & write name of the kala related to it	Identification- 1 Kala-1
3	Identify the organ & write its Utpatti as per Ayurved	Identification- 1 Utpatti-1
4	Identify the organ & write its visceral impressions (Any 3)	Identification- 0.5 Impressions-1.5
5	Identify the organ & write its blood/nerve supply	Identification- 0.5 Supply-1.5
6	Identify the organ & write it's the borders (Any two)	Identification- 1 Borders -1
7	Identify the organ & write its surfaces (Any two)	Identification- 1 Borders -1
8	Identify the organ& write its applied anatomy (Any 3 points)	Identification-0.5 Applied -1.5
Topic- Radiology		
1	Identify the X-ray & write the structures seen in it (Any 3)	Identification- 0.5 Structures-1.5
2	Identify the view of the X-ray & write the marked structures (Any two)	Identification- 1 Structures-1
Topic- Central Nervous System/ Sense organs		
1	Name the lobes of the given organ e.g., cerebrum	Each lobe – 0.5 Total -2

2	Identify the sense organ & write its nerve supply e.g., tongue	Identification- 1 Supply-1
3	Identify the marked structure and write its applied aspect (Any two)	Identification- 1 Applied aspect-1

6 H - III Viva Voce (70 Marks)

Recall Questions	Comprehention Questions	Application Questions
40 Marks	20 Marks	10 Marks
1. Sira-Dhamani-Strotas 2. Shariropakramaniya Sharir 3. Paribhasha Shaarir 4. Praman Shaarira 5. Anatomical terminologies 6. Kalaa Sharir 7. Indriya Sharir & Sensory organ 8. Reproductive system	1. Nervous system 2. Endocrine system 3. Lymphatic system 4. Cardiovascular system 5. Urinary system	1. Garbha Sharir, 2. Embryology 3. Respiratory system 4. Digestive system
e.g., Definition, types, numbers, planes, parts, Shlokas, etc.	e.g., Relations, Blood supply, Nerve Supply, Venous & Lymphatic drainage, etc.	e.g., Applied anatomy, Clinical anatomy, Surgical anatomy, Congenital anomalies etc.

7. Reference and Resourses

1. Parishadhya Shabdarth Sharir
2. Pratyaksha sharirıram
3. Sharisthana of all Samhita
4. Sushrut Samhita Sharirshtana- Dr. Bhaskar Govind Ghanekar
5. Brihat Shariram Vaidyaratna- P.S. Varrier
6. Abhinava Shariram- Acharya Damodar Sharma Gaur
7. Manava Sharir (Revised Edition)- Prof. Dinkar Govind Thatte
8. Sharir Rachana Vigyan (English)- Vaidya P.G. Athawale
9. Manual of Practical Anatomy Cunnigham Practical Manual Vol-1, Vol-2, Vol-3
10. Clinical Anatomy in Ayurveda - Prof. D.G. Thatte & Prof. Suresh Chandra
11. Ayurvedic Human Anatomy - Prof. Dr. Giridhar M. Kanthi
12. Sharir Rachana Vigyan Vol I & II– Dr. Sunil Kumar Yadav
13. Regional Anatomy - B. D. Chaurasia
14. Rachana Sharir Vigyana - Dr. Mahendra Sing
15. Relevant chapters of Brihtrayee and Laghuthrayee
16. Gray's Anatomy
17. Text Book of Human Anatomy- Inderbir Singh
18. Clinical Anatomy- Richard S Snell
19. Fundamentals of Human Anatomy- Dr. Chakraborthy
20. Human Osteology - Poddar
21. A Handbook of Anatomical Terminology, Dr. Nidhi Shrivastava, Dr. Ravi Kumar Shrivastava, Dr. Rakesh Kumar Sharma.

COURSE CURRICULUM FOR FIRST PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)



SAMHITA ADHYAYAN-1
(SUBJECT CODE- AyUG-SA1)

STUDY OF AYURVEDA CLASSICAL TEXT

(Applicable from 2021-22 batch onwards for 5 years or until further notification by NCISM, whichever is earlier)

ncism

प्राणाभिसरः प्राणायतनानाम्

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110058

SCAN ME

Samhita

NCISM

I professional Ayurvedacharya (BAMS)

Subject Code: AyUG-SA1

Samhita Adhyayan 1

Summary

Total number of Teaching : 400			
Lecture (LH) - Theory		**140**	**140 (LH)**
Paper I	140		
Non-Lecture (NLH) – Theory		**260**	**260 (NLH)**
Paper I	260		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	**100**	**--**	**75**	**10 (Set-FC)**	**15**
Sub-Total	**100**	**100**			
Total marks	**200**				

PREFACE

The main purpose of Samhita teaching is to enable the students to read, understand and practice the Samhitas. Samhita is nothing but an ancient Practical Manual of Ayurveda. Samhita teaching and learning process need to be practically oriented for a better understanding of the subject. It is the need of time to make some addition in the current teaching and learning process of Samhita to make it more relevant, practical, and contemporary. New teaching technology tools will certainly be helpful in the effective delivery of knowledge of Samhita. As per the revised regulation, the nomenclature of the subject is **Samhita Adhyayana-I**.

The subject includes Ashtanga Hridayam Sutrasthana 1 to 15 chapters and Charaka Samhita Sutrasthana 1 to 12 chapters as a part of Samhita Adhyayana-I for First Professional BAMS course. In this revision, NCISM has tried its best to take Samhita teaching beyond the four walls of the classroom and connected it with todays' living of people and society. For effective content delivery and to create interest in the subject of Samhita, it becomes evident to teach Samhita with practical demonstrations.

Samhita Path is the first step and most effective method of Samhita teaching adopted and practiced by our ancient acharyas. In order to facilitate practice the ancient Samhita learning, twice the non-lecture class of the total classes is exclusively reserved for Samhita learning activity. To make baseline uniformity in the process of learning, teaching methodology guidelines are provided which shall be followed while teaching the chapters of both the Samhitas. Students learn various principles of Ayurveda in Samhitas. Terminologies make the task initially difficult. Hence to make the Samhita learning more interesting, various education technology tools are included in the curriculum at various places understanding the need of the topic. Activity-based learning will enable the internalization of the concepts and will build a strong platform while learning other subjects of Ayurved.

As explained in Samhitas things learned in shastra(Science) and experience practically both when happens together will enhance the knowledge. It will further lead to application in practice.

Index

Course Code and Name of Course 5
AyUG-SA1 5
Samhita Adhyayan 1 5
Table 1- Course learning outcomes and matched PO. 5
Table 2 : Contents of Course AyUG-SA1 6
Table 3: Learning objectives (Theory) of Course AyUG-SA1 16
Table 4 : Practical/ Activities for AyUG - SA 1 67
Table 5: Non Lecture Activities Course AyUG-SA1 68
Table 6: Assessment Summary 75
6 A- Number of Papers and Marks Distribution 75
6 B - Scheme of Assessment (formative and Summative) 75
6 C - Calculation Method for Internal assessment Marks (15 Marks) 75
6 D - Evaluation Methods for Periodical Assessment 75
6 E - Paper Layout 76
6 F - Disribution of Theory Exam 76
6 G - Question paper blue print 77
6 H - Distribution of Practical Exam 79
7. Reference books/Resourses 79

Course Code and Name of Course

	Course code	Name of Course
	AyUG-SA1	**Samhita Adhyayan 1**

AyUG SA1 Course

Table 1- Course learning outcomes and matched PO.

SR1 CO No	**A1 Course learning Outcomes (CO) AyUG SA1 At the end of the course AyUG-SA1, the students should be able to-**	**B1 Course learning Outcomes matched with program learning outcomes.**
CO1	Distinguish the different *Samhitas*, their importance and methodology and familiarize with the tools of *Samhita Adhyayan*. (eg: *tantrayukti*)	PO2, PO9
CO2	Interpret and apply the *sutras* from the *Samhitas*.	PO1
CO3	Apply and evaluate the *Tridosha*, *Saptadhatu* and *Mala* principles (theory).	PO1, PO3, PO5
CO4	Practice and prescribe *Dincharya* (daily regimen), *Ritucharya* (seasonal regimen) and dietary principles for preservation of health.	PO2, PO7, PO8
CO5	Explore and distinguish different types of food, food groups and medicinal *dravyas* mentioned in *Samhitas*.	PO1, PO2
CO6	Identify various etiopathological factors and predict different treatment principles	PO1, PO5
CO7	Recognize and explain the fundamentals behind various therapeutics (*Shodhan* and allied) and parasurgical therapies.	PO2, PO5
CO8	Develop a code of behavior and show mature behaviour in particular to the scientific deliberations.	PO 6, PO 9

Table 2 : Contents of Course AyUG-SA1

Sr No	A2 List of Topics AyUG-SA1	B2 Term	C2 Marks	D2 Lecture	E2 Non-Lecture
1.	Introduction to Samhita- i. Definition of Samhita and its types and nomenclature**.** (Samhita- forms, nomenclature, commentary, types etc.) ii. Brief Introduction of Samhitas (Bruhatrayee), their commentaries and commentators (Preceptors, aut hours, redactors, commentators) iii. Tantrayukti, Tantraguna and Tantradosha iv. RachanaShaili & BhashaShaili (Composition and Language style) of Bruhatrayee. v. Anubandha Chatushtya vi. Ashta-Prashna vii. Trividha Jnyanopaya	1	(Indicated in Viva)	15	09
Ashtang Hriday Samhita - Sutrasthan (1-15 Adhyaya) -			50 marks		
2.	AH Su.1. Ayushkamiya Adhyaya- i. Ashtang Hridaya parichaya (Introduction to Ashtang Hridaya) ii. Dosha-dhatu-mala parichaya (Introduction to dosha, dhatus and mala) iii. Agni- koshtha swarup (Concept of digestive fire and bowel habits) iv. Rasa, virya, vipaka prabhav guna parichaya (Introduction to rasa, virya, vipaka, prabhav and guna) v. Rog-aarogya swaroop (Concept of health and disease) vi. Roga-aatur parikshan (Assessment of disease and diseased) vii. Desha and kaala parichaya (Introduction to habitat and time) viii. Chikitsa bheda (Types of treatment) ix. Pada chatushtaya Swaroopam (Concepts of four factors of treatment) x. Vyadhi sadhyasadhyatva (Types of prognosis)	1		08	03

	xi. Recitation of important shlokas				
3.	AH Su.2. Dinacharya Adhyaya- i. Dincharya vihaar (Importance of various regimen in Dincharya) ii. Shuddhi Niyam (Personal hygiene) iii. Dharmapalan evam sadvrutta palan iv. Recitation of important shloka	1		05	04
4.	AH Su.3. Rutucarya Adhyaya- i. Shadrutu (Classification of seasons according to Uttarayan and Dakshinayan) ii. Rutucharya (detailed regimen of the six seasons) iii. Rutusandhi (inter-seasonal period) iv. Recitation of important shlokas	1		05	04
5.	AH Su.4. Roganutpadaniya Adhyaya- i. Adharaneeya vega and chikitsa (symptoms arising due to suppression of natural urges and their treatment) ii. Dharneeya vega (Concept of urges which hav eto be suppressed) iii. Shodhan chikitsa (Importance of purification treatments) iv. Hita-aahar-vihar sevan (Importance of following healthy lifestyle) v. Recitation of important shlokas	I		05	04
6.	AH Su.5. Dravadravya Vijnaniya Adhyaya- i. Jala Varga (Water from different sources, various states of water) ii. Dugdha Varga (Milk and milk products) iii. Ikshu Varga (Sugarcane and its products) iv. Madhu varnana (Properties of honey) v. Tail Varga (Oils of various sources) vi. Madya Varga (Types of alcoholic beverages) vii. Mutra Varnana (Types of urine) viii. Recitation of important shlokas	I		05	04
7.	AH Su.6. Annaswaroopa Vijnaneeya Adhyaya- i. Shuka- DhanyanamSamanya Gunah (Properties of various types of cereals)	II		05	03

	ii. Shimbi- Dhanyananam Samanya Gunah (Properties of various types of Pulses) iii. Mamsasya Samanya Gunah (Properties of meat of various animals) iv. Shakayoh Samanya Gunah (Properties of various types of vegetables) v. Phalayoh Samanya Gunah (Properties of various types of Fruits) vi. Kritanna varganam Samanya Gunah (Properties of various types of cooked food) vii. Aushadhanam Samanya Gunah (Properties of various types of medicinal herbs)				
8.	AH Su.7. Annaraksha Adhyaya- i. Rajnikate- Vaidyasthiti (Important place of Vaidya in Kings palace) ii. Savishanna Lakshanam (Properties of poisoned food) iii. Savishanna Pariksha (Examination of food contaminated with poison) iv. Savishanna-Lakshana- Aushadha (Signs of food poisoning and its treatment) v. Viruddha Aahar (Incompatible food and food practices) vi. Satmikaran Krama (Method of adaptation of wholesome food habits and to taper unwholesome food habits) vii. Aahar-Shayan-Abrahmacharya – Trayopasthambha (Three accessary pillars of Health) viii. Recitation of important shlokas	II		04	03
9.	AH Su.8. Matrashitiya Adhyaya- i. AaharMatra (appropriate quantity of food) ii. Heen-matra, ati-matra bhojan dosha (Demerits of excess and less quantity of food) iii. Alasak, Visuchika (Etiopathogenesis and management principles of Vishuchika and Alasak) iv. Apatarpan chikitsa	II		05	04

	v. Types of Ajeerna (indigestion) and its causes vi. Bhojan-samyak yog (Ideal regimen and time for taking food) vii. KukshiVibhag (Imaginary parts of the stomach) viii. Details of Anupan (Liquid consumed along with or after food) ix. Recitation of important shlokas				
10	AH Su.9. Dravyaadi Vijnaniya Adhyaya- i. Dravya shreshthtva(Predominance of Dravya) ii. Dravyasya panchbhautikatvam (Prevalence of Panchamahabhutas in dravyas) iii. Panchbhautik dravyanaam guna(Characteristics of PanchabhautikDravyas) iv. Principles of dravyas viz Veerya-Vipaka- Prabhava v. Recitation of important shlokas	II		04	04
11	AH Su.10. Rasabhediya Adhyaya- i. Shadrasanaam utpatti (Origin of Shadrasa) ii. Shadrasa parichaya (Identity of Six Rasas) iii. Shadrasa karma, guna, atiyoga lakshana (Functions, properties and presentation of excessive intake of Six Rasas.) iv. Recitation of important shlokas	II		05	04
12	AH Su.11. Doshadi Vijnaniya Adhyaya- i. Importance of dosha dhatu mala ii. Dosha dhatu mala prakruta and vaikruta karma (normal and abnormal functions) iii. Dosha dhatu mala ashraya- ashrayi bhava (relation between dosha and dhatus) iv. Samanya chikitsa siddhanta for dosha dhatu mala vruddhi kshaya (treatment principles) v. Agni (Digestive fire) vi. General pathophysiology for origin of diseases vii. Ojus (Essence of dhatus)	III		08	05

	viii. Vriddhi-kshaya bheshaja ix. Recitation of important shlokas				
13	AH Su.12. Doshabhediya Adhyaya- i. Dosha and dosha bheda (Dosha and their types) ii. Dosha chaya, prakopa, prasham karanani (Causes of dosha accumulation, aggregation and alleviation) iii. Trividhakarana (three causative factors of disease) iv. Trividha Roga marga (three pathways of disease) v. Aatura parikshbhaav (assessment methods) vi. Recitation of important shlokas	III		08	05
14	AH Su.13. Doshopakramaniya Adhyaya- i. Tridosha- upakrama (Treatment principles of vitiated doshas) ii. Shuddha-ashuddha chikitsa lakshana (Accurate and inaccurate treatment) iii. Dosha gati (movement of doshas inside the body) iv. Concept of aama v. Dasha aushadha-kaala (ten types of times for administering medicines) vi. Recitation of important shlokas vii. Research Updates – Langhan : Fasting and autophagy induction – how cell recycle and renew theor content, a process called autophagy.	III		07	06
15	AH Su.14. Dvividhopakramaniya Adhyaya- i. Concept of Langhan and Brihan therapies (Treatment procedures for making the body thin and for nourishment) ii. Concept of Shodhan and shaman therapies (Purification and palliative treatments) iii. Concept of Atistaulya and atikarshya (Obesity and emaciation) iv. Recitation of important shlokas	III		05	05

16	AH Su.15. Shodhanadigana Sangraha Adhyaya- i. Groups of dravyas according to specific action ii. Groups of dravyas according to major ingredient as well as action	III		02	04
	Charak Samhita – Sutrasthan (1-12 Adhyaya):		50 marks		
17	Ch S Su 1. Deerghanjiviteeya Adhyaya- i. Ayurvedavataranam (Genealogy of Ayurveda) ii. Arogsya chaturvarge pradhanam karanam iii. Trisutra Ayurveda iv. Details of Shat padartha v. Ayurvedasya lakshanam tatha prayojan vi. Ayusho lakshanam paryayashcha vii. Samanyavisheshayorlakhanam viii. Tridanda ix. Vyadhinam trividho hetusamgrah x. Vyadhinam ashraya tatha Arogasya karanam xi. Atmano lakshanam xii. Details about Sharira and manas dosha xiii. Sadhyaasadhyata vikara chikitsa xiv. Rasa varnanam xv. Dravya bheda xvi. Aushadhinam nama-rupa-upyog gyan xvii. Bhishagbubhushoh kartavyam xviii. Yuktasya bhaishajyasya lakshanam xix. Bhishaktamasya lakshanam xx. Recitation of important shlokas	1		07	02
18	Ch S Su 2. Apamarga Tanduliya Adhyaya- i. Shiro Virechana Dravya & Main Indications ii. Vamana Dravya & Main Indications iii. Virechana Dravya & Main Indications iv. Asthapana Dravya & Main Indications	II		02	03

	v. Anuvasana Dravya & Main Indications vi. Ashtavimshathi Yavagu vii. Panchakarma Mahatwa & Vaidya Guna viii. Recitation of important shlokas				
19	Ch S Su 3. Aragvadhiya Adhyaya- i. Dwa Trimshath Churna Pradeha & Main Indications	II		01	03
20	Ch S Su 4. Shadvirechana-shatashritiya Adhyaya- i. Shadvirechan aashrya ii. Panchkashaya yoni iii. Panchvidh kashaya kalpana iv. Panch kashaya shatani	II		03	04
21	Ch S Su 5. Matrashiteeya Adhyaya- i. MatravatAhara ii. Nature of Ahara (Guru, Laghu) iii. AharaMatra iv. MatravatAharaPhala v. AharaSevanaVidhana on the bases of its nature vi. Swasthavrutta vii. Anjana viii. Dhumapana ix. Nasya x. Dantadhavana xi. Jivhanirlekhana xii. Gandusha xiii. Abyanga xiv. Parimarjana xv. VastraGandhaMalyadiDharana xvi. Shouchavidhi xvii. Kshoura Karma xviii. PadatraDharana xix. ChatraDharana xx. Important Shlokas for recitation xxi. Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuevination Mechanism of satiation and proper quantity of food (Sauhitya Matra)	II		03	05

22	Ch S Su 6. Tasyashiteeya Adhyaya- i. Classification Samvastara ii. Visarga Kala iii. Adana kal;a iv. Shadrutuvivechana and Charya v. Hamsodaka vi. Saatmya vii. Important shlokas for recitation viii. Research Updates: What causes the season: Summer and winter solistice- Equinoxes- Rotation of earth around sun.	II		04	04
23	Ch S Su 7. Naveganadharaniya Adhyaya- i. Adharneeya-Dharneeya vega lakshan, chikitsa ii. Vyayam (Details regarding exercise) iii. Ahita sevan evam varjya vidhi iv. Deha prakruti (Body constitution) v. Agantuja evam Pradnyaapradh janya vyadhi evam chikitsa vi. Impotant Shlokas for recitation vii. Research Updates: Corelation of genomic variation with the classification of Prakriti	II		04	04
24	Ch S Su 8. Indriyopakramaniya Adhyaya- i. Enumeration of Indriya, Dravya, Adhishthana, Artha, Buddhi ii. Manas Lakshana iii. Ekatvam of Manas iv. Sattvikatva, Rajasatva and Tamasatva of Manas v. Indriya PanchaPanchaka vi. Adhyatma Dravya Guna Sangraha vii. Mahabhuta – Indriya sambandh viii. Prakriti – Vikriti hetu ix. SadvrittaAnushthana x. Hetuchatushtaya xi. AnuktaSadvritta xii. Important Shlokas for Recitation xiii. Research updates: Mental health and gut microbiota.	II		04	03
25	Ch S Su 9. Khuddakachatushpada Adhyaya- i. Chikitsa Chatushpada ii. Roga-Arogya Lakshana	II		03	03

	iii. Chikitsa Lakshana iv. Vaidya, Dravya (Bheshaja), Paricharaka, Aatura guna v. Vaidya pradhanatva vi. Adnya chikitsak dosha vii. Sadvaidya lakshana viii. Vaidya kartavya ix. Vaidya Vritti x. Recitation of important Shlokas xi. Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as a crucial component in medical edication				
26	Ch S Su 10. Mahachatushpada Adhyaya- i. Catushpaada-bheshajam alam aarogyaayeti (aatreya-krta) ii. Bheshaja-abheshajayo tulyatva pratipaadana – (maitreya-krta) iii. Its conclusion by Atreya iv. Pareekshya-kaarino hi kusalaa bhavanthi v. Cikitsaa sootram vi. Cikitsaayaam yasolaabhe kaaranam vii. Asaadhyaroga-cikitsaayaam haani viii. Further division of saadhya-asaadhyata ix. Sukha-saadhya lakshanam x. Krcchra-saadhya lakshanam xi. Yaapya lakshanam xii. Pratyaakhyeya lakshanam xiii. Benefit of knowledge of prognosis xiv. The versatile usage of the term 'mithyaa-buddhi' xv. Recitation of important shlokas	II		03	03
27	Ch S Su 11. Tisraishaniya Adhyaya- i. TrividhaEshana (Three Desires of life) ii. Paralokaeshana iii. Chaturvidhapariksha iv. Punarjanma siddhi by Chaturvidhapramanas v. Trayopasthambha vi. Trividhabala	III		06	04

	vii. Trividhaayatana viii. Atiyoga, Heenayoga and Mithya yoga of artha, karma and kaala ix. Trividharoga x. Treatment for manasavyadhi xi. Trividharogamarga xii. Trividhavaidya xiii. Trividhaoushadha xiv. Ashtatrika xv. Important Shloka for Recitation				
28	Ch S Su 12. Vatakalakaliya Adhyaya- i. Vata guna ii. Views of various Acharyas on Vata dosha Guna avum Karma iii. Vayu prakop-prasham karan iv. Akupita, kupita vayu karma v. Vata Dosha – Clinical application vi. Akupita-kupita pitta karma vii. Akupita- kupita kapha karma viii. Atreya's exploration on Tridosha ix. Important shloka for recitation	III		04	05 + 15 (for yearly competitions)
• Note- In this column distribution of 130 activity is given. Remaining 130 is for Samhita Pathan.					

Table 3: Learning objectives (Theory) of Course AyUG-SA1

AyUG-SA1 Learning Objective									
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 Must to know/ desirable to know/Nice to know**	**E3 Level Does/ Shows how/ Knows how/ Know**	**F3 T-L method**	**G3 Assessment**	**H3 Formative /summative**	**I3 Term**	**J3 Integration**
Topic 1- Introduction To Samhitas: Time (Lecture:-15 ; Non lecture:-09 hours)									
CO1	Explain the term Samhita	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	I	
CO1	Identify Bruhatrayee	Cognitive/ Recall	Must know	Knows	Lecturer	Written or Viva	F & S	I	
CO1	Discuss the various Samhitas and Commentaries in brief	Cognitive/ Comprehension	Must know	Knows	Lecturer / Group Discussion	Written or Viva	F & S	I	
CO1	Discuss the various preceptors, aut hours, redactors and commentators in brief	Cognitive/ Comprehension	Must know	Knows	Lecturer	Written or Viva	F & S	I	
CO1	Apply various Tantrayukties like Adhikaran, Yoga, Padarth, Uddesh, Nirdesh, Vaakyashesh, Prayojan, Upadesh, arthapatti, Ekant,	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative	I	

	Anumat, Vyakhyan, Samshay, Atitavekshan, Anagatavekshan, Swasadnya, Samucchaya, Nidarshan, Nirvachan, Niyog.								
CO1	Describe various Tantraguna	Cognitive/ Comprehension	Must now	Knows how	Lecturer	Written or Viva	Formative and Summative	I	
CO1	Describe various Tantradosha	Cognitive/ Comprehension	Must know	Knows	Lecturer	Written or Viva	Formative and Summative	I	
CO1	Describe rachanashaili (composition style) and bhashashaili (language style) of Samhitas	Cognitive/ Comprehension	Must know	Knows how	Lecturer / Discussion	Written or Viva	F & S	I	Ayurved Itihas
CO1	Discuss about pattern (method) of writing of classical texts	Cognitive / Comprehension	Must know	Knows how	Lecturer	Puzzle	Formative	I	Ayurved Itihas
CO1	State different types of styles of language of classical text	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Viva	Formative and summative	I	
CO1	Interpret Anubandha chatushtya with examples	Cognitive/ Problem solving	Must know	Knows how	Lecturer / Class discussion	Enquiry Based Learning	Formative	I	

CO1	Interpret Ashta Prashna with example	Cognitive/ Problem solving	Must know	Knows how	Lecturer/ Demonstration	Enquiry Based Learning	Formative	I	
Topic 2- Ashtang Hriday Samhita Sutrasthan Chapter-1- Ayushkamiya Adhyaya: **Time** (Lecture:- 08 ; Non lecture- 03 hours)									
CO1	Discuss the hierarchy of Ayurvedotpatti (descend of Ayurveda)	Cognitive /Recall	Must know	Know	Lecture	Written or Viva	F & S	I	
CO1	Explain the significance of Ashtanga Hrudaya	Cognitive /Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Enlist the eight branches of Ayurveda	Cognitive/ Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the concept of dosha with respect to qualities (guna), location in body and time period (kaala)	Cognitive/ comprehensions	Must know	Knows how	Lecture and Group Discussion	Written & Viva	F & S	I	
CO3	Discuss role and superiority of dosha in manifestation of diseases	Cognitive/ comprehensions	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO3	Identify the dosha sthanas	Cognitive/ comprehensions	Must know	Knows how	Discussion	Model Making (Working Model)	Formative	I	
CO3	Enlist the saptadhatus and mala.	Cognitive/ Recall	Must know	Know	Lecture	Written & Viva	F & S	I	
CO4	Explain the concept of Samsarga (combination of 2 dosha) & Sannipata	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written & Viva	F & S	I	

	(combination of 3 dosha)								
CO4	Elucidate concept of Prakruti (body constitution)	Cognitive/ Comprehension	Must know	Knows how	Lecture/Discussion	Written & Viva	F & S	I	
CO6	Explain the three types of digestive fire (agni)	Cognitive/ Comprehension	Must know	know How	Lecture/Demonstration in healthy volunteers.	Written or Viva	F & S	I	
CO6	Describe the three types of Koshtha	Cognitive/ Comprehension	Must know	Knows how	Lecture/Demonstration in healthy volunteers.	Written or Viva	F & S	I	
CO5	Explain the effect of rasas on tridosha	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Describe the two types of potencies (Dwividha Virya)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Describe the three types of Vipaka	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Explain the three types of dravya on the basis of Prabhav	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	
CO5	Explain the concept of Vruddhi &Kshaya (increase and decrease)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Group discussion	Written & Viva	F & S	I	

CO6	Discuss the causative factors of health and disease	Cognitive/ comprehe nsions	Must know	Know how	Lecture/group discussion	Puzzle / Viva	Formativ e and summati ve	I	
CO6	Define health (aarogya) and disease stage(roga)	Cognitive/ Recall	Must know	Know	Lecture	Written & Viva	Formativ e and summati ve	I	
CO6	Explain prakruta (normal) and vikruta (abnormal) conditions	Cognitive/ comprehe nsions	Must know	Knows how	Lecture	Written & Viva	Formativ e and summati ve	I	
CO6	Explain the types of diseases (Roga)	Cognitive/ Comprehe nsion	Must know	knows How	Lecture	Written or Viva	F & S	I	
CO6	Explain the concept of Roga Adhishthana (abode of diseases)	Cognitive/ Cognitive/ Comprehe nsion	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Enumerate Manas dosha	Cognitive/ Recall	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6, CO8	Discuss the methods of assessment of patient	Cognitive/ Comprehe nsion	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO8	Explain the methods of examination of disease	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/OPD clinics	Written & Viva	F & S	I	
CO6	Explain the three types of habitats(desha)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/Multimedia aids	Written or Viva	F & S	I	

CO6	Explain the two types of Bheshaja Kala	Cognitive / Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the Classification the treatment modules (Aushadha)	Cognitive / Comprehension	Must know	Know How	Lecture	Written or Viva	F & S	I	
CO6	Explain the treatment module for mental diseases (Mano Dosha Aushadham)	Cognitive / Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6, CO8	Elaborate chikitsa chatuspada (4 factors in treatment)	Cognitive /Comprehension	Must know	Know How	Lecture/ Demonstration in hospital	Written or Viva	F & S	I	
CO6	Explain the types of prognosis of disease	Cognitive/ Comprehension	Must know	Know How	Lecture/ Demonstration on patients / Multimedia aids	Written or Viva	F & S	I	
CO6	Explain Concept of anupakramaneeya Atura Lakshana	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Enlist the chapters of Sutra Sthana	Cognitive/ Comprehension	Must Know	Knows	Self-learning	Written or Viva	F & S	I	
CO1	Enlist all Sthana and Adhyayas of Ashtang Hridaya and Uttara Tantra	Cognitive/ Recall	Nice to Know	Knows	Self-learning	Written or Viva	F & S	I	
CO2	Recite the shloka from 1 to 35	Cognitive/ Recall	Must Know	Show	Self-learning	Viva	F & S	I	
CO1	Identify Adhikaran, Yoga, Padarth, Uddesh,	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

	Anagatavekshan Tantrayukti in this chapter.								
Topic -3. Ashtang Hriday Samhita Sutrasthan Chapter-2- Dinacharya Adhyaya Time (Lecture:- 05 Non lecture- 04 hours)									
CO4	Explain the need of waking up before sunrise	Cognitive/ Comprehension	Must know	Know how	Lecture	Written & Viva	F & S	I	
CO4	Explain the importance of Shaucha Vidhi	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written & Viva	F & S	I	
CO4	Explain the importance and contraindications of brushing (Dantadhavana)	Cognitive/ Comprehension	Must know	Knows how	Lecture/ Multimedia aids	Written & Viva	F & S	I	
CO4	Identify the herbs used for Dantadhavan	Cognitive/ Application	Must know	Shows how	Herbal garden visit	Written or Viva Group Activity (For identifications of Currently using tooth paste. Herbal pastes. Types of pastes)	F & S	I	Dravya guna dept
CO4	Distinguish Sauveeranjana and Rasanjan	Cognitive/ Comprehension	Must know	Know how	Lecture/Demonstration	Written or Viva Debate (Students will search benefits and harms supported by current literature. Dabate in class)	F & S	I	Visit to Rasashastra dept for Identification of drugs

CO4	Discuss contraindications of betel leaf consumption (Tambula)	Cognitive/ Application	Must know	Know how	Lecture/ Debate on benefits and harms of Betel leaf consumtion. supported by current literature.	Written or Viva	F & S	I	
CO4	Elaborate the concept of Abhyanga along with contraindications	Cognitive/ Comprehe nsion	Must know	Know How	Lecture/ /Multimedia aids	Written & Viva	F & S	I	Panchk arma dept
CO4	Discuss the importance, contraindications of exercise	Cognitive/ Application	Must know	Knows How	Lecture/ Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the rules regarding exercise and adverse effects of excessive exercise	Cognitive/ Application	Must know	Knows how	Group Discussion Debate: Types of Exercise. e.g Arobiuc and anaerobic etc. supported by current literature discussions on Concept.	Written & Viva	F & S	I	
CO4	Explain the benefits of powder massage (udvartan)	Cognitive/ Comprehe nsion	Must know	Know how	Lecture/demonstration ECE	Written & Viva	F & S	I	Panchk arma dept
CO4	Elucidate the benefits and contraindications of bathing (snana)	Cognitive/ Comprehe nsion	Must know	Knows how	Lecture/group discussion Literature search and Discussion by students.	Written & Viva	F & S	I	
CO4	Explain the time of having food.	Cognitive/ Comprehe nsion	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO4	Explain rules regarding natural	Cognitive/ Comprehe	Must know	Know how	Lecture	Written or Viva	F & S	I	

	urges.	nsion							
CO4	Explain the importance of righteousness (Dharmapalan)	Cognitive/ Comprehe nsion	Must know	Know how	Flipped Classroom Group Activity: self identification of Mistake they are doing Plan to rectify and reassessment after duration.(6 months)	Written or Viva	F & S	I	
CO4	Enumerate the types of bad deeds(Dasha Vidha Papakarma)	Cognitive/ Recall	Must know	Know How	Flipped Classroom	Written or Viva	F & S	I	
CO4, CO8	Explain the concept of good principles and conduct (Sadvrutta)	Cognitive	Must know	Knows how	Flipped Classroom	Written or Viva	F & S	I	
CO4	Explain the principles of personal hygiene (shuddhi)	Cognitive/ Comprehe nsion	Must know	Knows how	Flipped Classroom	Written or Viva	F & S	I	
CO2	Recite the shlokas from 1 to 48	Cognitive/ Recall	Must know	Show	Self-learning	MCQ/viva/quiz	F & S	I	
CO8	Assess and observe the Dincharya Priciples.	Skill	Must know	Does	Proforma based assessment in healthy volunteers/ patients.	Work book- Viva	F & S	I	
CO8	Justify the importance of Dincharya	Cognitive/ Applicatio n	Must know	Does	Application of Principles in own life	Viva	F & S	I	
CO1	Identify Upadesh, Ekant, Prayojan Tantrayukties in this chapter.	Cognitive/ Applicatio n	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

Topic – 4. Ashtang Hriday Samhita – Sutrasthan Chapter 3- Rutucarya Adhyaya-Time (Lecture:- 05 ; Non lecture 04 hours)									
CO4	Explain the six seasons and the months in which they fall	Cognitive/ Comprehension	Must know	Knows	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Elicudate the status of strength (bala) in Uttarayana and Dakshinayana	Cognitive/ Recall	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Explain the relation between strength (bala)& seasons	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status(bala, agni, dosha), appropriate food and regimen for Hemant rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written or Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Shishira rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Shishira rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written or Viva	F & S	I	
	Discuss the climatic conditions, health status (bala, agni,	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	

	dosha), appropriate food and regimen for Greeshma rutu.								
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Varsha rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Discuss the climatic conditions, health status (bala, agni, dosha), appropriate food and regimen for Sharad rutu.	Cognitive/ Application	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO8	Justify the importance of Rutucharya	Affective	Must Know	Does	Group discussions	Viva	F & S	I	
CO4	Describe the special instructions pertaining diet (rasa, guna) and seasons	Cognitive/ Comprehension	Must know	Knows How	Lecture/group discussions/Multimedia aids	Written & Viva	F & S	I	
CO4	Identify the significance of Rutusandhi	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO2	Recite the shloks - 1 to 6, 55-58	Cognitive/ Recall	Must Know	Show	Self learning	Written/viva/quiz	F & S	I	
CO4	Apply the Principles of Rutucharya in practice	Skill	Must Know	Does	Proforma based assessment of healthy individuals or patients	Viva	F & S	I	
CO1	Identify Prayojan, Swasdnya, Apadesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	

Topic -5 Ashtang Hriday Samhita – Sutrasthan- Chapter 4. Roganutpadaniya Adhyaya--**Time** (Lecture:- 05 ; Non lecture 04 hours)									
CO6	Enlist the adharaneeya vega (natural urges not to be suppressed by force)	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of adhovata (flatus) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of purisha (fecal matter/ defecation) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of mootra (urine) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of udgaar (belching) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of kshvathu (sneezing) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of trushna (thirst) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	

CO6	Specify the diseases due to suppression of kshudha (hunger) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written/viva	F & S	I	
CO6	Specify the diseases due to suppression of nidra (sleep) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of kaasa (cough) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Enumerate the diseases due to suppression of shrama shwasa and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of jrumbha (yawning) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of ashru (tears) and its treatment	Cognitive/ Recall	Must know	Knows	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of vaman(vomiting) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Specify the diseases due to suppression of shukra (semen) and its treatment	Cognitive/ Recall	Must know	Knows How	Lecture	Written & Viva	F & S	I	

CO6	Describe the incurable condition of Vegadharan	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Explain vegdharan as the root cause for many diseases and its common treatment	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the dharaneeya vega (urges to be controlled)	Cognitive/ Comprehension	Must know	Knows How	Lecture/ Group discussion	Written or Viva	F & S	I	
CO8	Justify the importance of adharneeya and dharneeya vega to maintain health	Cognitive/ Application	Must know	Does	Group discussions	Group discussions/ Class activities	F & S	I	
CO6	Explain importance of Shodhana chikitsa (purification techniques)	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the importance of Brumhana after Shodhana chikitsa	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written & Viva	F & S	I	
CO6	Explain the concept of Aagantu roga (traumatic diseases) and its treatment	Cognitive/ Comprehension	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Discuss the concept of rutu-shodhana (elimination of doshas according to seasons)	Cognitive/ Application	Must know	Knows How	Lecture/Group Discussion	Written & Viva	F & S	I	

CO6 CO8	Describe the importance of healthy diet and regimen.	Cognitive/ Comprehension	Must know	Knows How	Lecture/Group discussion	Written & Viva	F & S	I	
CO6	Comply with health rules regarding vegdharan and hita-aahar-vihar.	Cognitive/ Comprehension	Must know	Shows		Group discussion/ Class activities	F & S	I	
CO2	Recite the shlokas from number 1 to 22, 24-31, 35	Cognitive/ Recall	Must know	Show	Self-learning	Written/viva/quiz	F & S	I	
CO3, CO6	Assess the sign and symptoms caused due to suppression of Adharaneeya Vegas.	Skill	Must Know	Show how	Proforma based assessment in healthy volunteers/patients.	Problem based assessment	Formative	I	
CO1	Identify Uddesh, Nirdesh, Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic -6 Ashtang Hriday Samhita – Sutrasthan- Chapter 05 Dravadravya Vijnaniya Adhyaya--**Time** (Lecture:- 05 ; Non lecture 04 hours)									

CO5	Differentiate between Gangambu (rain water) and Samudrambu (sea water)	Cognitive/ Comprehension	Desirable	Knows	Lecture discussion	Written or Viva	Formative	I	
CO5	Describe attributes of water from different sources	Cognitive/ Comprehension	Nice to know	Knows	Lecture discussion	Written or Viva	Formative	I	
CO5	Explain the utilities of different states of water (avoiding of drinking water, hot water (ushnambu), cold water	Cognitive/ Comprehension	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	

	(sheetambu), Boiled and cold water (kwathita-sheetambu)								
CO5	Write the qualities of Narikelodakam (coconut water)	Cognitive/ Recall	Must know	Knows	Discussion	Written or Viva	F & S	I	
CO5	Discuss the properties of ksheeram (milk), Dadhi (curd), Takra (mastu), navaneetam (white butter), Ghritam	Cognitive/ Comprehension	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	
CO5	List Properties of milk (ksheeras) of different sources.	Cognitive/ Recall	Nice to know	Knows	Lecture	Written or Viva	Formative	I	
CO5	Differentiate the properties of ama (unboiled)and shruta (boiled) ksheeram (milk)	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	I	
CO5	Explain the rules for curd consumption	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written or Viva	F & S	I	
CO5	Write the properties of various milk preparations	Cognitive/ Recall	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Identify the properties and uses of sugarcane and its products	Cognitive/ Recall	Nice to know	Know	Lecture discussion	Written or Viva	F & S	I	
CO5	Enlist the properties of honey and Identify the various guidelines related to use of honey	Cognitive/ Recall	Must know	Knows how	Lecture discussion	Written or Viva	F & S	I	
CO5	Write the properties of tilatailam (Sesame oil)	Cognitive/ Recall	Must know	Know	Lecture discussion	Written or Viva	F & S	I	

CO5	Identify the characteristics of different oils	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Classify various types of madyas (wines)	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
	explain the properties of Shukta, Dhanyamlam, sauveeraka, tushodaka etc.,	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO5	Describe the properties and uses of various types of urine	Cognitive/ Comprehension	Nice to know	Know	Lecture discussion	Written or Viva	Formative	I	
CO2	Recite the shlokas- 1,16-17, 20,29-32, 51,52,56	Cognitive/ Recall	Must know	Show	Self-learning	Written or Viva	F & S	I	
CO5	Classify some common dravyas like milk, ghee, sugar, jaggery etc according to their varga (group) and qualities	Skill	Must know	Show how	class Discussion	Viva/ class activities	F & S	I	
CO1	Identify Vaakyashesh, Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic -7 Ashtang Hriday Samhita – Sutrasthan- Chapter 6. Annaswaroopa Vijnaneeya Adhyaya- **Time** (Lecture:- 05 ; Non lecture 03 hours)									
CO5	To classify the shukadhanya (cereals)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	F & S	II	Dravyaguna
CO5	Enumerate the qualities of each shukadhanya (cereals)	Cognitive/ Recall	Desire to know	Know	Lecture	Written or Viva	Formative	II	Dravyaguna
CO5	Classify the shimbidhanya (pulses)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	F & S	II	Dravyaguna

CO5	Enumerate the qualities of each shimbi dhanya (pulses)	Cognitive/ Recall	Desire to know	Know	Lecture discussion	Written or Viva	Formative	II	Dravyaguna
CO5	Enumerate the qualities of various types of mamsa (meat)	Cognitive/ Recall	Nice to know	Knows	Lecture discussion	Written or Viva	Formative	II	
CO5	Enumerate the qualities of various types of shaka	Cognitive/ Recall	Must know	Knows	Lecture discussion	Written or Viva	Formative and summative	II	Dravyaguna
CO5	Enumerate the qualities of various types of fruits	Cognitive/ Recall	Desire to know	Knows	Lecture discussion	Written or Viva	Formative	II	Dravyaguna
CO5	Enumerate the qualities of various types of krtannavarga (cooked food)	Cognitive/ Recall	Must to know	Know	Lecture discussion	Written or Viva	Formative and summative	II	Bhaishajyakalpana
CO5	Enumerate the qualities of various types of medicinal dravyas (herbs)	Cognitive/ Recall	Must know	Knows	Lecture discussion	Written or Viva	F & S	II	Dravyaguna
CO5	Classify certain common dravyas according to varga and functions	Skill	Must know	Show how	Group activities	Viva	F & S	II	
CO1	Identify Samucchaya, Prayojan, Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -8 Ashtang Hriday Samhita – Sutrasthan- Chapter 7. Annaraksha Adhyaya- **Time** (Lecture:- 04 ; Non lecture 03 hours)									
CO8	Describe the role of Rajavaidya (Noble Physiian)	Cognitive/ Comprehension	Nice to know	Know	Discussion	Written or Viva	Formative	II	

CO6	Identify the characteristics adulterated food stuffs	Cognitive/ Comprehension	Nice to know	Knows	Discussion	Written or Viva	Formative	II	Agadatantra
CO6	Describe the symptoms caused by poisoned or adulterated food	Cognitive/ Comprehension	Desire to know	Know	Discussion	Written or Viva	Formative	II	Agadatantra
CO6	Discuss the treatment module for poisoning	Cognitive/ Comprehension	Desire to know	Know how	Discussion	Written or Viva	Formative	II	Agadatantra
CO6	Define virudhahara (incompatible foods) with examples	Cognitive/ Recall	Must know	Know	Lecture discussion	Written & Viva	F & S	II	
CO6	Discuss the treatment methods for virudhahara (incompatible foods)	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written & Viva	F & S	II	
CO6	Follow the principles regarding viruddh aahar	Cognitive/ Application	Must know	Know how	Discussion	Class Activities	Formative	II	
CO4	Explain the process of satmikaran (accustomization)	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written & Viva	F & S	II	
CO4	Explain the three accessory pillars of life (diet, sleep and non-celibacy)	Cognitive/ Comprehension	Must know	Know how	Lecture discussion	Written & Viva	Formative	II	
CO4	Explicate the significance of judicious sleep	Cognitive/ Comprehension	Must know	Know how	Discussion	Written & Viva	F & S	II	
CO2	Recite the shloka- 45, 48, 50, 53-55	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	II	
CO1	Identify Nidarshan, Samucchay, Prayojan,	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	

	swasadnya Tantrayukties in this chapter.								
Topic -9 Ashtang Hriday Samhita – Sutrasthan- Chapter 8. Annaraksha Adhyaya- **Time** (Lecture:- 05 ; Non lecture 04 hours)									
CO4	Explain the importance of matra (proper quantity of food) for maintenance of health	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO4	Describe how to quantify food	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO4	Determine the adverse effects of heena matra (inadequate quantity of food) and atimatra (excess quantity of food) ahara	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6	Discuss the etiopathogenesis, symptoms and treatment principles of Alasaka and Visuchika.	Cognitive/ Application	Must know	Knows how	Lecture/PBL	Written or Viva	F & S	II	
CO6	Classify between various types of Apatarpan therapies	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6	Classify various types of ajeerna	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO6, CO4	Enlist unwholesome food items	Cognitive/ Recall	Must know	Knows	Group discussion	Written or Viva	F & S	II	
CO4	Identify various unhealthy food habits	Cognitive/ Comprehension	Must know	Knows	Group discussion	Written or Viva	F & S	II	

CO4	Recommend ideal regimen for consumption of food (aaharvidhi)	Cognitive/ Comprehension	Must know	Knows how	Discussion	Written or Viva	F & S	II	
CO4	Differentiate between the food items recommended and non-recommended for daily use	Cognitive/ Comprehension	Must know	Knows	Lecture Group Activity.	Written or Viva	F & S	II	
CO4	Advise the right order of food items in a meal	Cognitive/ Application	Must know	Does	Discussion/ activities	Viva/ proforma activity	F & S	II	
CO4	Select anupanas (after drink) based on ahara and aushadha	Cognitive/ Comprehension	Must know	Knows how	Lecture/Discussion	Written or Viva	F & S	II	
CO4	Identify the conditions where Anupan is contraindicated	Cognitive/ Comprehension	Desire to know	Knows	Lecture/Discussion	Written or Viva	F & S	II	
CO4	Advise the right time of food consumption (Aahar Kala)	Cognitive/ Application	Must know	Shows	Lecture/Discussion/activities	Written or Viva	F & S	II	
CO2	Recite the shlokas-1-3, 6,7, 17, 19, 20,21, 25-30, 33-34	Cognitive/ Recall	Must know	Shows	Self - learning	Written or Viva	F & S	II	
CO4	Justify the various principles of diet regarding quantity and time	Cognitive/ Application	Must know	Does	Discussion/ activities	Viva/activities	Formaive/Summative	II	
CO1	Identify Prayojan, Upadesh, Padartha, Yog, Swasdnya Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -10 Ashtang Hriday Samhita – Sutrasthan- Chapter 9. Dravyaadi Vijnaniya Adhyaya-**Time** (Lecture:- 04 ; Non lecture 04 hours)									

CO5	Justify the predominance of Dravya	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Elaborate the prevalence of Panchamahabhutas in Dravyas	Cognitive/ Comprehension	Must know	Knows how		Written or Viva	F & S	II	
CO5	Differentiate between Rasa and Anurasa (primary taste and secondary taste)	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Analyse the characteristics of Panchabhautik dravyas	Cognitive/ Application	Must know	Shows	Lecture	Written or Viva	F & S	II	
CO5	Recognise the aushadatva (medicinal value) of all substances	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Demonstrate the importance of Panchabhautikdravyas in restoration and continuation of health.	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Explain the importance of Mahabhutas and drug action	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Define Veerya and Vipaka	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Discuss the types and the various opinions related with Veerya.	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Explain Vipaka and its types.	Cognitive/ Comprehension	Must know	Knows	Lecture	Written or Viva	F & S	II	

CO5	Discuss the hierarchy of active principles of Dravya (matter)	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO5	Define Prabhava	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Recall the exemplified functions of various active principles	Cognitive/ Recall	Must know	Knows	Lecture	Written or Viva	F & S	II	
CO5	Describe the Saman pratyayarabdha and Vichitra-pratya-arabdha Dravyas.	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	II	
CO2	Recite the shlokas – 1,2,3, 4,10, 12, 13, 20,26,27,28	Cognitive/ Recall	Must know	Knows	Self-learning	Written , Viva/quiz	F & S	II	
CO1	Identify Swasdnya, Nirvachan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -11 Ashtang Hriday Samhita – Sutrasthan- Chapter 10. Rasabhediya Adhyaya- **Time** (Lecture:- 05 ; Non lecture 04 hours)									
CO2	Describe the formation of rasa from mahabhoota	Cognitive/ Comprehension	Must know	Know	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	Dravyaguna
CO2	Identify the examples and exceptions of the six rasa	Cognitive/ Comprehension	Must know	Know	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	Dravyaguna
CO2	Explain the features of six rasa with examples and exceptions	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	
CO2	Explain the functions of six rasa	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	

CO2	Describe the symptoms due to excess use (atiyog) of the six rasa	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	
CO2	Analyze the tartamatva of rasas (hierarchy of rasa on the basis of characteristics)	Cognitive/ Application	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	II	Dravyaguna
CO2	Enlist the 63 types of permutation and combination of rasa	Cognitive/ Recall	Nice to know	Know how	Lecturer Audio-Visual aids	Written or Viva	F & S	II	Dravyaguna
CO2	Classify the dravyas according to the rasa skand (group)	Skill	Must know	Know how	Discussion/ activities based proformas	Viva/Activities	F & S	II	
CO2	Recite the shloks-1-21, 33-38	Cognitive/ Recall	Must know	Knows	Self-learning	Written or Viva	F & S	II	
CO1	Identify Uddesh, Nirdesh, Apavarga Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic -12 Ashtang Hriday Samhita – Sutrasthan- Chapter 11. Doshadi Vijnaniya Adhyaya- **Time** (Lecture:- 08 ; Non lecture 05 hours)									
CO3.	Discuss the importance of dosha dhatu mala	Cognitive/ Application	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3.	Explain dosha dhatu mala prakruta karma (normal functions)	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	

CO3	Identify the normal functions of dosha, dhatu and mala	Skill	Must know	Show How	Activity based proformas	Viva/ through various Activities	Formative or Summative	III	
CO3.	Explain dosha dhatu mala vaikruta (vruddha and ksheena) karma (abnormal functions)	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Identify the effects due to vruddhi (increase) or kshaya (decrease) of dosha,dhatu and mala	Skill	Must know	Show How	Activity based proformas	Viva/ through various Activities	Formative or Summative	III	
CO3.	Explain the relation between dosha and dhatu.	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO5	Explain the treatment principles for vitiated dosha, dhatu and mala	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3.	Elucidate the concept of agni	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written & Viva	Formative or Summative	III	
CO3	Discuss Superiority of Jatharagni	Cognitive/ Application	Must know	Know how	Lecture, Discussion	Written & Viva	Formative or Summative	III	
CO3	Assess the status of Agni.	Skill	Must know	Shows	Activities	Viva/Activites	Formative or Summative	III	
CO6.	Explain the general pathophysiology for origin of Diseases	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	

CO3 CO6	Explain the concept of Ojas	Cognitive/ Comprehension	Must know	Know how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3 CO6	Explain aetiological factors for Ojakshaya	Cognitive/ Comprehension	Must know	Know how	Lecturer	Written or Viva	Formative or Summative	III	
CO3 CO6	Explain Ojakshaya Lakshana	Cognitive/ Comprehension	Must know	Know how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3 CO6	Identify Ojakshaya Lakshana	Skill	Must know	Show how	Lecturer Audio-Visual aids	Viva/activities	Formative or Summative	III	
CO5	Discussgeneral diet principles for vriddhi and kshaya (vitiatied doshas)	Cognitive/ Application	Must know	Show How	Activity based proformas	Viva/ planned activities	Formative or Summative	III	
CO2	Recite shlokas from 1 to 45	Cognitive	Must Know	Knows	Self-learning	Written or Viva	Formative or Summative	III	
CO1	Identify Samucchaya, Adhikaran, Vakyashesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -13 Ashtang Hriday Samhita – Sutrasthan- Chapter 12. Doshabhediya Adhyaya- **Time** (Lecture:- 08 ; Non lecture 05 hours)									
CO3	Enumerate the seats of vata, pitta and kapha doshas	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Enlist types of vata, pitta and kapha dosha.	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Describe the specific seats and functions of types of vata, pitta and kapha doshas.	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	

CO3	Discuss the importance of types of vata, pitta and kapha doshas.	Cognitive/ Application	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Identify the different types of dosha according to location and functions	Skill	Must know	Knows how	Proforma based activities	Written or Viva	Formative or Summative	III	
CO3	Elucidate the concept of Chaya (accumulation), Prakopa (aggravation) and Prashama (alleviation) of vata, pitta and kapha doshas.	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	Formative or Summative	III	
CO3	Discuss the impact of seasonal variation in accumulation and aggravation of vata, pitta and kapha doshas.	Cognitive/ Application	Must know	Knows how	Lecturer Audio-Visual aids/Discussion	Written or Viva	Formative or Summative	III	
CO3	Discuss the superiority of dosha in manifestation of diseases	Cognitive/ Application	Must know	Know how	Lecturer Audio-Visual aids/Discussion	Written or Viva	Formative or Summative	III	
CO3.	Identify general aetiological factors responsible for manifestation of diseases	Cognitive/ Application	Must know	Know how	Lecturer/ Discussion	Written or Viva	Formative or Summative	III	
CO3	Describe Trividha Roga marga (pathways of diseases)	Cognitive/ Comprehension	Must know	Knows	Lecturer	Written or Viva	Formative or Summative	III	
CO3	Enlist various disorders of Trividha Roga marga (pathways of diseases)	Cognitive/ Recall	Must know	Knows	Lecturer/	Written or Viva	Formative or Summative	III	

CO3	Recognise the importance of concept of Trividha Roga marga in diagnosis and prognosis of diseases.	Cognitive/ Application	Must know	Knows how	Discussion	Written or Viva	Formative or Summative	III	
CO3	Enumerate the symptoms of aggravated Vata-Pitta – Kapha dosha	Cognitive/ Recall	Must know	knows	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Identify the prakopa lakshana of dosha in various diseases	Skill	Must know	Show How	Discussion, Group activities	Written or Viva	Formative or Summative	III	
CO3	Explain the concept of unnamed diseases	Cognitive/ Comprehension	Must know	Knows how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Define svatantra and partantra vyadhi (primary and secondary diseases)	Cognitive/ Recall	Must know	Know	Lecture	Written or Viva	Formative or Summative	III	
CO3	Enumerate the types of assessment methods	Cognitive/ Recall	Must know	Know	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Demonstrate the types of assessment methods.	Skill	Must know	Shows how.	Group Activities	Viva	Formative	III	
CO3	Explain the concept of Guru Vyadhit and LaghuVyadhit (gravity of disease and contrary presentation)	Cognitive/ Comprehension	Must know	Knows how	Lecture, Discussion	Written or Viva	Formative or Summative	III	
CO3	Enlist the 63 types of Permutation and combination of dosha	Cognitive/ Recall	Nice to know	Knows	Lecture	Written or Viva	Formative or Summative	III	
CO2	Recite the shlokas 1-72	Cognitive/ Recall	Must know	Shows	Self-learning	Written, Viva/Quiz	F & S	III	

CO1	Identify Apadesh, Samucchaya Tantrayukties in this chapter Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -14 Ashtang Hriday Samhita – Sutrasthan- Chapter 13 Doshopakramaniya Adhyaya-**Time** (Lecture:- 07 ; Non lecture 06 hours)									
CO3	Explain the therapeutic procedures and specific management of vata, pitta and kapha dosha	Cognitive/ Comprehension	Must know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Explain the seasonal regimen to be adopted in various combinations of vitiated Doshas	Cognitive/ Comprehension	Must know	Knows	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Discuss the importance of treatment of doshas in accumulation stage	Cognitive/ Application	Must know	Knows how	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Differentiate the accurate and inaccurate therapeutic procedures.	Cognitive/ Comprehension	Must know	Knows how	Lecture/Group Discussions	Written or Viva	F & S	III	
CO6	Elaborate the factors responsible for movement of doshas from koshta to shakha and shakha to koshta.	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of tiryag-gatadosha (migration to other abodes) and its treatment principle.	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Describe the line of treatment for SthaniDosha (native) and AagantuDosha (immigrant)	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	

CO6	Explain the concept of Aama.	Cognitive/ Comprehension	Must to know	Knows how	Lecture	Written or Viva	F & S	III	
CO6	Enumerate the symptoms of saam and niraam doshas.	Cognitive	Must to know	Knows	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the symptoms of saamadosha and their treatment	Cognitive	Must to know	Knows	Lecture	Written or Viva	F & S	III	
CO6	Analyze the 10 types of aushadha sevan kaal (Time, Method and indications of administration of medicine).	Cognitive/ Application	Must to know	Knows how	Lecture/Discussion	Written or Viva	F & S	III	
CO2	Recite the shlokas-1-41	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	III	
CO1	Identify Swasadnya, Nidarshan, Uddesh, Nirdesh Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -15 Ashtang Hriday Samhita – Sutrasthan- Chapter 14 Dvividhopakramaniya Adhyaya-**Time** (Lecture:- 05 ; Non lecture 05 hours)									
CO6	Elaborate the concept of two types of therapies - Langhan and Brihan	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Describe the indications, methods, benefits of Brihan and symptoms of excess Brihan	Cognitive/ Comprehension	Must know	Know how	Lecture/Discussion	Written or Viva	F & S	III	
CO6	Explain the indications, methods, benefits of Langhan and symptoms of excess Langhan	Cognitive/ Comprehension	Must know	Know how	Lecture/ Discussion	Written or Viva	F & S	III	

CO6	Describe the indications of shodhan and shaman therapies	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of Atisthaulya with the treatment module	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO6	Elaborate the concept of Atikarshya with the treatment module	Cognitive/ Comprehension	Must know	Know how	Lecture	Written or Viva	F & S	III	
CO2	Recite the shlokas – 1 to 7, 31to 36	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	III	
CO1	Identify Nirvachan, Samucchay, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic -16 Ashtang Hriday Samhita – Sutrasthan- Chapter 15, Shodhanadigana Sangraha Adhyaya- **Time** (Lecture:- 02 ; Non lecture 04 hours)									
CO7	SElect the vaman, virechan, niruha, nasya gana according to their functions	Cognitive/ Comprehension	Nice to know	Knows how	Lecture/Multimedia aids	Viva	Formative	III	Dravyaguna
CO7	Define the dravyas with their ingredients and actions.	Cognitive/ Recall	Nice to know	Know	Lecture/Multimedia aids	Viva	Formative	III	
CO7	Identify the dravyas frequently used in treatments	Skill	Nice to know	Shows	Herbal garden visit	Viva	Formative	III	
Topic-17. Charak Samhita Sutrasthan Chapter 1. Dirghamjivitiyam Adhyaya; Time (Lecture:- 07 ; Non lecture 02 hours)									
CO1	Discuss the Ayurvedavataranam (Genealogy of Ayurveda)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO8	Discuss the chaturvarga and its main factor for achieving it	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	

CO6	Discuss about the trisutra of Ayurveda (three principles of health and disease)	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the about the six padarthas (six basic principles)	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO1	Discuss the characteristics of Ayurveda	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of Ayu (life) and its synonyms	Skill	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of samanya (similarity) and visha (difference/uniqueness)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss about the Tridanda (tripod of life)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the classification and characteristics of the dravyas (basic elements)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the classification and characteristics of the gunas	Cognitive	Must know	Show How	Lecture	Written or Viva	F & S	I	
CO2	Define karma (actions)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Explain samavaya (inseparable concomitance)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO1	Explain the aims of Ayurveda	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	

CO6	Explain the three causative factors of disease	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO6	Explain the abode of vyadhi and arogya	Cognitive	Must know	Show how	Lecture	Written or Viva	F & S	I	
CO2	Discuss the characteristics of Atma	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO6	Explain the sharira and manasa doshas	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO6	Discuss the treatment of sharira and manasa doshas	Cognitive	Must know	knows How	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of vayu and its treatment	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of pitta and its treatment	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO3	Discuss the gunas of shleshma and its treatment	Cognitive	Must know	Knows How	Lecture	Written or Viva	F & S	I	
CO6	Discuss about the treatment for sadhya and asadhya vikara (curable and incurable disease)	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Explain the rasa	Cognitive	Must know	Knows how	Lecture	Written or Viva	F & S	I	
CO2	Classify the dravya based on their effects on body and their origin	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO7	Enumerate the dravya based on the useful parts (upayuktanga)	Cognitive	Desirable to know	Know how	Lecture/Multimedia aids	Written or Viva	F & S	I	
CO7	Discuss about the identification of drugs by name, form and its action	Cognitive	Must know	Know how	Lecture/Multimedia aids	Written or Viva	F & S	I	

CO8	Discuss about the duties for one aspires to be a physician.	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO7	Discuss about the best drug	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO8	Discuss about the best physician endowed with all good qualities	Cognitive	Must know	Know how	Lecture	Written or Viva	F & S	I	
CO2	Recite the shlokas 15, 24,28,29, 31, 41, 42, 44-67, 134,135	Cognitive/ Recall	Must know	Shows	Swadhyaya (self learning)	Written or Viva	F & S	I	
CO1	Identify Uddesha, Nirdesh Tantrayukties in this chapter	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	I	
Topic-18. Charak Samhita Sutrasthan Chapter 2. Apamarga Tanduliya Adhyaya; **Time** (Lecture:- 02 ; Non lecture 03 hours)									
CO7	Enumerate few Shiro Virechana Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Vamana Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Virechana Dravya & Main Indications	Cognitive	Desirable know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate few Asthapana Basti Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna

CO7	Enumerate few Anuvasana Basti Dravya & Main Indications	Cognitive	Desirable to know	Knows	Lecture/Audiovisual aids/ Herbal garden visit	Written or Viva	F & S	II	Dravyaguna
CO7	Enumerate the names & Main Indications of 28 Types of Yavagu	Cognitive	Desirable to Know	Knows	Lecture/Audiovisual aids	Written or Viva	F & S	II	Rasshastra-bhaishjya dept
CO7	Explain the Importance Of Panchakarma	Cognitive	Must know	Knows	Lectures	Written or Viva	F & S	II	Panchkarma
CO7	Explain the features of Vaidya	Cognitive	Must know	Knows	Lecture/Group Discussion	Written or Viva	F & S	II	
CO7	Recite Shlokas 15,16,36	Cognitive/ Recall	Must know	Shows	Self-learning	Written or Viva	F & S	II	
CO7	Identify the dravyas on the basis of actions	Psychomotor	Must know	Shows	Herbal garden visit	Viva	Summative	II	Dravyaguna
CO1	Identify Upadesh, Samucchaya Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-19. Charak Samhita Sutrasthan Chapter 3. Aragvadhiya Adhyaya-**Time** (Lecture:- 01 ; Non lecture 03 hours)									
CO7	Mention Thirty Two Churna Pradeha & Main Indications	Cognitive	Desirable to know	Knows	Lectures/Multimedia aids	Written or Viva	Formative	II	Ras-bhaishjya/ Kayachikitsa
Topic-20. Charak Samhita Sutrasthan Chapter 4. Shadvirechana-shatashritiya Adhyaya-**Time** (Lecture:- 03 ; Non lecture 04 hours)									
CO7	List the six abodes of purgatives	Cognitive/ Recall	Must know	Know	Discussion	Written or Viva	F & S	II	Dravya guna
CO7	Enlist the five tastes for medicinal preparation	Cognitive/ Recall	Must know	Know	Lecture, discussion	Written or Viva	F & S	II	Rasashastra &

									bhaishajya Kalpana
CO7	Define the five types of medicinal preparations/ forms	Cognitive/ Recall	Must know	Know	Lecture / Multimedia aids	Written or Viva	F & S	II	Ras-bhaishjya
CO7	Enlist the 50 groups of medicines as per their actions	Cognitive/ Recall	Desirable to know	Know	Lecture	Written or Viva	F & S	II	Dravya guna
CO7	Limitations for description of medicinal drugs in Samhita	Cognitive/ Comprehension	Nice to know	Know how	Lecture	Written or Viva	Formative	II	
CO1	Identify Swasadnya , Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-21. Charak Samhita Sutrasthan Chapter-05 Matrashiteeya Adhyaya- **Time** (Lecture:- 03 ; Non lecture 05 hours)									
CO5	Explain Matravat Ahara	Cognitive/ Recall	Must know	Know	Lecturer, Audio-Visual aids, Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO5	Define and enlist Nature of Ahara (Guru, Laghu)	Cognitive/ Recall	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO5	Explain the significance of MatravatAharaPhala	Cognitive/ Recall	Must know	Know how	Lecturer, Audio-Visual aids, Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO5	Discuss role of AharaSevanaVidhana on the bases of its nature	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids	Written or Viva	**Formative and Summative**	II	Swastarutta

					Group Discussion				
CO2	Define Swasthavrutta	Cognitive/ Recall	Must know	Knows	Lecturer Audio-Visual aids Group Discussion	.Viva	**Formative and Summative**	II	Swastarutta
CO6	Explain Anjana	Cognitive/ Comprehension	Must know	Know	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta
CO6	Explain Dhumapana	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta, Shalakya , Panchakarma
CO6	Explain Nasya	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta, Shalakya , Panchakarma
CO6	Explain Dantadhavana	Cognitive/ Comprehension	Must know	know How	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO6	Explain Jivhanirlekhana	Cognitive/ Comprehension	Must know	know How	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO6	Explain Gandusha	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids	Written or Viva	**Formative and Summative**	II	Swastarutta,

					Group Discussion				
CO6	Explain Abhyanga with types	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,Panchakarma
CO6	Describe Parimarjana	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Describe the VastraGandhaMalyadiDharana	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Explain the concept of Shouchavidhi	Cognitive/ Comprehension	Must know	Knows how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Discuss the Kshoura Karma	Cognitive/ Comprehension	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Define PadatraDharan with importance	Cognitive/ Recall	Must know	Know how	Lecturer Audio-Visual aids Group Discussion	Written or Viva	**Formative and Summative**	II	Swastarutta,
CO4	Explain the ChatraDharana	Cognitive/ Recall	Must know	knows How	Lecturer Audio-Visual aids	Written or Viva	**Formative and Summative**	II	Swastarutta,

					Group Discussion				
CO4	Justify the importance of the procedures mentioned as dincharya	Cognitive/ Application	Must know	Shows how	Group Discussion	Group Discussion/ Project work	**Formative and Summative**	II	
CO2	Recite the shlokas 4, 12-13, 34-35, 56-57,68-69, 81-83, 103	Cognitive/ Recall	Must know	Shows	Swadhyaya (self learning)	Viva	F & S	II	
CO1	Identify Upadesh, Padarth,, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO4	Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuevination Mechanism of satiation and proper quantity of food (Sauhitya Matra)	Cognitive	Nice to know	Knows how	Lecture; Audio-vidual aids	Group discussion	-	II	
Topic-22. Charak Samhita Sutrasthan Chapter-6. Tasyashiteeya Adhyaya-**Time** (Lecture:- 04 ; Non lecture 04 hours)									
CO2	Discuss the importance of Classification of Samvastara	Cognitive/ Comprehension	Must know	Knows how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Explain the significance of Visarga Kala	Cognitive/ Comprehension	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	

CO2	Explain the significance of Adana kala	Cognitive/ Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Explain the nature of climate in Shadrutu	Cognitive/ Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Explain Sevaniya and Nishiddh Ahara Vihara in Shadrutu	Cognitive/ Recall	Must know	Know how	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Define and explain the properties of Hamsodaka	Cognitive/ Recall	Must know	Knows	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO4	Justify the regimen mentioned as per seasons	Cognitive/ Application	Must know	Show how	Group Discussion	Group Discussion/ Project work/viva	Formative and Summative	II	
CO2	Describe Saatmya and its types	Cognitive/ Recall	Must know	Knows	Lecture Audio-Visual aids Group Discussion	Written or Viva	Formative and Summative	II	
CO2	Recite Shloka number 18, 21, 29, 35, 45, 49, 50	Cognitive/ Recall	Must know	Knows	Swadhyaya –Self learning	Written or Viva	Formative and Summative	II	
CO1	Identify Uddesh- Nirdesh , swasadnya Tantrayukties in this chapter..	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	

CO4	Research Updates: What causes the season: Summer and winter solistice- Equinoxes- Rotation of earth around sun.	Cognitive/ Application	Nice to know	Knows	Lecture, Audio-vidual aids	Group discussion	-	II	
Topic-23. Charak Samhita Sutrasthan Chapter-7. Naveganadharaniya Adhyaya-**Time** (Lecture:- 04 ; Non lecture 04 hours)									
CO4	Enumerate Adharaniya and Dharaniya Vega	Cognitive/ Recall	Must to know	know	lecture/ Group discussion/	Written or Viva	F & S	II	
CO4 CO6	Describe symptoms and treatment pattern of Adharaniya Vega	Cognitive	Must to know	Know how	lecture/ Group discussion /quiz	Written or Viva	F & S	II	
CO4	Cite symptoms and treatment pattern of Dharaniya Vega	Cognitive	Must to know	Know how	lecture/ quiz/Group discussion	Written or Viva	F & S	II	
CO4	Quote the contraindicated actions of mind, speech and body.	Cognitive	Must to know	Know	lecture/ quiz/Group discussion	Written or Viva	F & S	II	
CO4	Describe concept, effects and benefits of exercise	Cognitive	Must to know	Know how	lecture/ recitation/ quiz/Audiovisual aids	Written or Viva	F & S	II	Swasthavritta
CO4	describe symptoms due to excessive exercise	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz/Audiovisual aids	Written or Viva	F & S	II	Swasthavritta
CO4	Describe the action which should be avoided in excess	Cognitive	Must to know	Know how	lecture/ Group discussion /quiz	Written or Viva	F & S	II	

CO4	Describe pattern of Ahita Krama tyaga	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Classify deha prakruti	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO6	Describe Aagantuj vyadhis (exogenous diseases)	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Nidan
CO6	Describe Pradnyaparadhaj vyadhi	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Nidan
CO4	State Vikar Anutpatti Vidhi (Preventive measures of diseases)	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO6	describe treatment of Aagantuj (exogenous) and Manas (psychological)diseases	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Describe shodhan treatment as per season	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	Panchkarma
CO4	Describe Aapta and anapta purush	Cognitive	Must to know	Know	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO4	Describe the rules of eating curd	Cognitive	Must to know	Know how	lecture/ Group	Written or Viva	F & S	II	

					discussion/ quiz				
CO2	Recite shloka number 27, 28, 29, 30, 31, 39, 40, 55, 60.	Cognitive	Must to know	Know how	lecture/ Group discussion/ quiz	Written or Viva	F & S	II	
CO1	Identify Arthapatti , Nirvachan, Vyakhyan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO4	Research Updates: Corelation of genomic variation with the classification of Prakriti	Cognitive/ Recall	Desire to know	Know	lecture/ Audio-vidual aids	Group discussion	-	II	
Topic-24. Charak Samhita Sutrasthan Chapter-8. Indriyopakramaniya Adhyaya- **Time** (Lecture:- 04 ; Non lecture 03 hours)									
CO2	Enumerate Indriya/ Dravya/Adhishthana/ Artha/ Buddhi	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Write the characteristics of Mana	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Justify the ektvam of Manas	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	State that Sattvikatva, Rajasatva and Tamasatva of Manas	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Tabulate Indriya PanchaPanchaka	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Quote Adhyatma Dravya Guna Sangraha	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative &Summative	II	

CO4	State the predominant Mahabhuta in each Indriya	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Know the role of Indriya and Mana in Prakriti and Vikriti	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Discuss the Causes and Benefits of Sadvritta Anushthana	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	Elaborate the Do's and Don'ts in Sadvritta	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids/ Group Discussion	Written or Viva	Formative & Summative	II	
CO4	Explain Hetuchatushtaya	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO4	State the guideline for Anukta Sadvritta	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO2	Recite the shloka number 7-13, 34	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO1	Identify Upadesh , Samucchaya, Yog Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative & Summative	II	
CO4	Research updates: Mental health and gut microbiota.	Cognitive/ Application	Nice to know	Know	Lectures/ Audio-Visual Aids	Group discussion	-	II	
Topic-2CO Charak Samhita Sutrasthan Chapter-9. Khuddakachatushpada Adhyaya- T**ime** (Lecture:- 03 ; Non lecture 03 hours)									
CO8	Cite Chikitsa Chatushpada (four components of healthcare)	Cognitive	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	

CO8	Define Roga-Arogya (disease-health)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Define Chikitsa (treatment)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Vaidya (physician)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Dravya (medicine)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Paricharaka (nursing staff)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List the Qualities of Aatura (patient)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	State the iimportance of Vaidya in the 4 components of healthcare	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Write the Complications due to ignorant physician	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Describe the Sadvaidya Qualities (good physician)	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Write the duties of the physician	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	List Four types of Vaidya vritti (attitude of the physician)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	

CO8	Recite the shloka number 3,4,5,18,20,21, 24,25,26	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	II	
CO8	Discuss the qualities and duties of a good physician	Cognitive/ Application	Must know	Shows how		Written or Viva	Formative	II	
CO1	Identify Uddesh, Nirdesh, Nidarshan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
CO8	Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as a crucial component in medical edication	Cognitive	Nice to know	Knows	Lecture / Audio-Vidual aids	Group discussion	-	II	
Topic-26. Charak Samhita Sutrasthan Chapter-10. Mahachatushpada Adhyaya- T**ime** (Lecture:- 03 ; Non lecture 03 hours)									
CO6	Substantiation of Chatushpaada- bheshajam alam aarogyaayeti (aatreya-krta), Bheshaja-abheshajayo tulyatva pratipaadana – (maitreya-krta), Its conclusion by Atreya,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written & Viva	F & S	II	
CO6	Explain the Cikitsaa sootram- Cikitsaayaam yasolaabhe kaaranam,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning	Written or Viva	F & S	II	

					contemporary examples				
CO6	Asaadhyaroga-cikitsaayaam haani,	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written or Viva	F & S	II	
CO6	Describe the upamaana pramaana	Cognitive/ Recall	Desirable to know	Knows	Lecture with substantiation of the point by mentioning contemporary examples	Written or Viva	F & S	II	
CO6	Enumerate and analyse the further classification of saadhya-asaadhyata	Cognitive/ Recall	Must know	Knows	Lecture with live demonstration in OP	Written or Viva	F & S	II	
CO6	Identify, judge and discuss Sukha-saadhya lakshanam, Krcchra-saadhya lakshanam, Yaapya lakshanam and Pratyaakhyeya lakshanam	Cognitive/ Recall	Must know	Knows how	Lectures and clinical demonstration	Viva / written Problem based assessment	F & S	II	
CO6	Apply and interpret the benefit of knowledge of prognosis	Cognitive/ Recall	Must know	Knows	Lectures	Written or Viva	F & S	II	
CO6	Analyse the term mithyaa-buddhi and accept responsibility to not end up as a mithyaa-buddhi at	Cognitive/ Recall	Must know	Knows	Lectures	Written or Viva Discussions	F	II	

	any point of time of the profession								
CO6	Recite Shloka number 14 to 20	Cognitive/ Recall	Must know	Knows	Lecture, swaadhyaaya	Viva	**F & S**	II	
CO1	Identify Nirnaya, Swasdnya, Sanshaya, Ekant Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	II	
Topic-27. Charak Samhita Sutrasthan Chapter-11. Tisraishaniya Adhyaya- **TIme** (Lecture:- 06 ; Non lecture 05 hours)									
CO4	Explain the significance of the three desires for prana (life) and dhana(means of life).	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO4	Discuss the concept of paraloka	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Discuss different opinions on the concept of punarjanma (re-birth)	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Define characteristics of Aapta	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Define pratyaksha, anumana and yuktipramana with example	Cognitive/ Recall	Must know	Know how	Lectures/ Audio-Visual Aids	Lectures/ Audio-Visual Aids	Formative & Summative	III	

CO2	Justify punarjanma by using aaptopadesha, pratyaksha, Anumana and yuktipramana	Cognitive/ Application	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative &Summative	III	
CO4	Explain the importance of thrayopasthamba (sub-pillars of life).	Cognitive/ Application	Must know	Know how	Lectures/ Audio-Visual Aids	Written-MCQ/ SAQ/ LAQ & Viva	Formative & Summative	III	
CO4	Discuss the three types of bala (strength)and its importance.	Cognitive/ Application	Must know	Know how	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO6	Describe the three causes of disease.	Cognitive/ Application	Must know	Know	Lectures/ Audio-Visual Aids	Written & Viva	Formative & Summative	III	
CO6	Identify the symptoms due to excessive, less and improper use of sense organs	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Identify the symptoms due to excessive, less and improper verbal, psychic and physical actions.	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Define Prajnaparadha	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO6	Identify the signs of excess, less and improper kaala (season)	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Define nija, agantu and manasa roga.	Cognitive/ Recall	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Discuss general treatment protocol for manasavyadhi (psychological disorders)	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Discuss the three disease pathways	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO8	Classify the three types of physicians	Cognitive/ Comprehension	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Describe daivavyapashraya, yuktivyapashraya and satvavajayachikitsa	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO6	Describe antahaparimarjana, bahiparimarjana,shastrapranidhanachikitsa.	Cognitive/ Comprehension	Must know	Know how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO2	Discuss importance of ashta trika.	Cognitive/ Application	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO2	Recitation of Shloka number 18,19,20,21,22,23,24, 25, 47.	Skill	Must know	Know	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO1	Identify Swasadnyaa, samucchaya , Samshaya, Nirvachan Tantrayukties in this chapter.	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	F & S	III	
Topic-28. Charak Samhita Sutrasthan Chapter-12. Vatakalakaliya Adhyaya-**TIme** (Lecture:- 04; Non lecture 05 hours)									
CO4	explore the various properties of vata	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Discuss the opinions of various aacharyas on different aspects of Vata dosha	Cognitive/ Recall	Must Know	Knows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Explore various factors responsible for aggravation and and pacification of vata dosha	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids/Group Discussion	Written or Viva	Formative & Summative	III	
CO4	enumerate prakrita and vikrita karma of vata	Cognitive/ Recall	Must know	Knows how	Lectures/ Audio-Visual Aids/ Group Discussion	Written or Viva	Formative & Summative	III	
CO4	Explain the clinical application of Vata Guna	Cognitive/ Recall	Desirable to know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	

CO4	Describe the action of normal and aggravated Pitta	Cognitive/ Comprehension	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe the action of normal and aggravated Kapha	Cognitive/ Comprehension	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Describe atreya's exploration on Tridosha and its importance	Cognitive/ Comprehension	Must know	Knows how	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO4	Recite the shlokas-8,11,12	Cognitive/ Recall	Must know	Shows	Lectures/ Audio-Visual Aids	Written or Viva	Formative & Summative	III	
CO1	Identify Padartha, Vyakhyan , Anumat Tantrayukties in this chapter	Cognitive/ Application	Must know	Knows how	Lecturer/ Group discussion	Viva	Formative & Summative	III	

Table 4 : Practical/ Activities for AyUG - SA 1

Term wise distribution of allotted time				
Term	**Total teaching (400 hrs)**	**Lecture (140 hrs)**	**Non Lecture (260hrs)**	
			Samhita Pathan (130 hrs)	**Activities- In class/ Hospital (130 hrs)**
I	**130 hrs.**	**50 hrs.**	**50**	**30**
II	**140 hrs.**	**50 hrs.**	**40**	**50**
III	**130 hrs.**	**40 hrs.**	**40**	**50**

Table 5: Non Lecture Activities Course AyUG-SA1

Non Lecture activities- (Samhita Pathan / In Class Activities & Hospital Based activities) : 260 hrs

SN	Name of Practical	Term	
1.	Samhita Pathan	I, II, III	Total 130 in all three terms. (Term I-50 hrs; Term II - 40hrs; Term III - 40hrs)
	In Class Activities/ Case Based Activities/ Field Activities		
2.	1. Introduction to Samhita Problem based learning : Application of Tantrayukti for chapter number 1, 2 of Ashtang Hridaya and chapter 1st of charak Samhita.	I	5 hrs.
	Group Activity Interpret Anubandha Chatushtya with examples Interpret Ashta Prashna with example	I	4 hrs
	Ashtang Hriday Samhita - Sutrasthan (1-5Adhyaya)		
3.	AH Su 1. Ayushkamiya Adhyaya Commentary Based activity- Fetch the meaning of important terms on the basis of commentary. (Any 30 important words). Make your own dictionary.	I	3 hrs
4.	AH Su 2. Dinacharya Adhyaya- Survey Activity: Application of concepts- Dincharya and its application: Proforma based assessment in healthy volunteers/ patients. Daily routine shall be recorded on the basis of predesigned proforma and then shall discuss. Communication Skill introduction. Survey Role play.	I	4 hrs

5.	AH Su 3. Rutucarya Adhyaya- Application of concepts- Ritucharya and application - Proforma based assessment in healthy individuals or patients.	I	4 hrs
6.	AH Su 4. Roganutpadaniya Adhyaya- Case Based Activity/Learning- Assess the sign and symptoms of given case on the basis of learning of Adharaneeya Vegas and find out the probable causative factors on the basis of principles taught.	I	4 hrs
7.	AH Su 5. Dravadravya Vijnaniya Adhyaya Group Activity-(Group presentation)- Utility of Dravyas:- Allocate the Dravadravya Vargas among student groups. Every group will Justify (represent) the practical utility of dravyas allotted to them.	I	4 hrs
8.	6. Annaswaroopa Vijnaneeya Adhyaya- Group presentation- Justify the utility of this chapter in present era- Every group will illustrate the utility of their assigned Aahara Dravya Varga (Discuss practically available dravyas)	**II**	3 hrs
9.	7. Annaraksha Adhyaya- Discussion- Explore the present dietary habits- Explore the Various diet combinations used in present society (by four family/ Relatives/ neighborhood) on the basis of principles learned for viruddhahar. Discuss them in class. Trayopastambha -Importance of Nidra- Flipped classroom- Share the prerecorded videos/ other material with students before class. On the basis of these have discussion.	**II**	4 hrs
10.	8. Matrashitiya Adhyaya- Case Based learning- Determine adverse effects of heena matra	**II**	4 hrs

	(inadequate quantity of food) and atimatra (excess quantity of food) ahara:- (Video clip of patient suffering from a type of Ajeerna can be shared in class and then group wise discussion on the concept.) Group Activity- Differentiate between the food items recommended and non-recommended for daily use:- Cross refer the previous chapters and demonstrate the rationale behind the wholesome or unwholesome nature of these enlisted Dravyas referring their qualities.		
11.	9. Dravyaadi Vijnaniya Adhyaya- Application of concepts- Enlist the dravyas according to Rasa, Veerya, Vipaka, Prabhav. (Can refer chapter 5,6,10 of Ashtang Hriday and Chapter 2, 3, 4 of Charak Samhita). Apply the concepts learned in present chapter to understand the action of Dravyas.	**II**	4 hrs
12.	10. Rasabhediya Adhyaya- Case based learning- Prepare proforma enlisting the sign and symptoms of excess consumption of six Rasas and regular diet pattern. Asses the predominance of Rasa consumption in patients or healthy volunteeres. Then Correlate with the case findings.	**II**	4 hrs
13.	11. Doshadi Vijnaniya Adhyaya- Case Based learning-(CBL)- Assess the patient for Vriddhi and Kshaya Lakshanas of Dosha-Dhatu-Mala, based on predesigned proforma. Discuss these case findings later in class.	**III**	5 hrs
14.	12. Doshabhediya Adhyaya- Model making Activity- Working models on Dosha Sthanas or Subtypes of Doshas, Chaya, Prakop and Prashama of Doshas: PBL/CBL	**III**	5 hrs

	Give one problem/case based on Samanya Dosha Nidan. Student will identify possible causative factors responsible for vitiation of Doshas in given problem.		
15.	13. Doshopakramaniya Adhyaya- Case Based learning-(CBL)- Group activity- Observe the signs and symptoms of Ama in any five patients (Group wise) and present and discuss it in class. Seminar Presentation- a. Understand Aushadha Kaal in relation with suntypes of Vata Dosha. b. Recognize the principles applicable during treatment of Saam Dosha and Dushyas.	**III**	6 hrs
16.	14. Dvividhopakramaniya Adhyaya- Case based learning- Find out the causative factors of Atishualya in present era (On the basis of predesigned proforma) CBL Share video clip of any patient suffering from Atikarshya- On the basis of previous learning discuss the contributing factors responsible for malnourishment. (Explore Dhatu Sneha Parampara in present context).	**III**	5 hrs
17.	15. Shodhanadigana Sangraha Adhyaya- Group Presentation- Divide the various Aushadha Vargas among students and a group will represent each varga and related practical information.	**III**	4 hrs
	Charak Samhita – Sutrasthan (1-12 Adhyaya)		
18.	CS Su 1. Deerghanjiviteeya Adhyaya- Compilation work: (based on commentry) ● Student has to write 20 terminologies with meanings referring Chakrapani commentary. Then after these terms shall be discussed in class.	I	2

19.	CS Su 2. Apamarga Tanduliya Adhyaya- Visit to Dravyaguna Department- Identify the dravyas on the basis of different karmas	**II**	3 hrs
20.	CS Su 3. Aragvadhiya Adhyaya- Group Discussion- Probable mode of action of drugs applied externally? In which form they will more absorbable? (May take help of published literature; discuss linking with Ayurveda fundamentals.) Practical demonstrations in Panchakarma unit on patients. Workshop/ demonstration of preparation of different lepas useful in different conditions.	**II**	3 hrs
21.	CS Su 4. Shadvirechana-shatashritiya Adhyaya- Practical Demonstration: Visit to Dravyaguna Department and demonstration of various Mahakashay and its uses (Integration with Dravyaguna department)	**II**	4 hrs
22.	CS Su 5. Matrashiteeya Adhyaya- Visit to Panchakarma Unit of Hospital – Demonstration of abhyanga, mardana, udvartana and other procedures to be followed in daily routine (Integration with Panchakarma Department) Group Project : Gather information about nutritive values of Nitya Sevaniya Dravyas. Assess their classical properties. Discuss why these dravyas are specially advised for regular consumption.	**II**	5 hrs
23.	CS Su 6. Tasyashiteeya Adhyaya- Documentation- Festival and rutu- Documenting the changes in the food habits and	**II**	4 hrs

	lifestyle as per the rutu with the parents and elders and also discussing on relevance of rutucharya concept with Indian festivals. Short Essay writing /Poster making- Does and don'ts to be followed according to various seasons (Refer both the Samhitas for this activity)		
24.	CS Su 7. Naveganadharaniya Adhyaya:- Vedio clip making Activity- Educating people about harms of vega dharana by social media campaigns Group Discussion- Finding reasons for vega dharana in present day lifestyle.	**II**	4 hrs
25.	CS Su 8. Indriyopakramaniya Adhyaya- Group Presentation- Sadvrutta – Interpreting relevance of different sadvrutta in present scenario. Developing new sadvruttas as per todays' lifestyle referring classics.	**II**	3 hrs
26.	CS Su 9. Khuddakachatushpada Adhyaya- Doctor Patient communication introduction, Role play. Feedback collection of chikitsa chatushpada Group activity- Collect Feedback on qualities of Vaidya from rogi and upasthata. Collect Feedback on qualities of rogi from vaidya and upasthatha Collect Feedback on qualities of upasthatha from rogi and Vaidya Collect feedback on qualities of dravya from the experts of dravyaguna and rasa shastra	**II**	3 hrs
27.	CS Su 10. Mahachatushpada Adhyaya- Developing proforma for sadhya asadhya vyadhi lakshanas-	**II**	3 hrs

	Guide students on how to prepare a proforma to assess any available parameters.		
28.	CS Su 11. Tisraishaniya Adhyaya- Debate :- Punarjanma siddhant as per different thoughts. Debate on punarjanma with different references as per classics and contemporary understanding.	**III**	5 hrs
29.	CS Su 12. Vatakalakaliya Adhyaya- Role Play (Enact sambhasha parishad) – Distribute the characters of the rishis given in chapter. And guide them with the script. Arrange a forum where these students will be doing sambhasha parishad on vata kala-akala. Decode the sutras- Students in groups will use different tools like infographics/ animation/ ppts to illustrate the normal functions of Vata Dosha explained in present chapter. (Refer Chakrapani commentary thoroughly to understand the meaning of Sanskrit shlokas). Introduction to Group Dynamics. Communication skills for Group Discussions.	**III**	5 hrs
30.	Shloka Recitation Competition- At the end of the year/ every term such competition shall organized by department.	**III**	5 hrs
31.	Ayurveda Quiz- On the basis of assigned syllabus.	**III**	5 hrs
32.	Poster making Competition / SA writing completion / Making video clips for general people to make awareness about Ayurved living.	**III**	5 hrs

Table 6: Assessment Summary

6 A- Number of Papers and Marks Distribution

S.No.	Subject Code	Papers	Theory	Practical/Clinical Assessment					Grand Total
				Practical/ Clinical	Viva	Electives	IA	Sub Total	
1.	AyUG-SA1	1	100	-	75	10 (Set-FC)	15	100	200

6 B - Scheme of Assessment (formative and Summative)

SR.NO.		PROFESSIONAL COURSE	DURATION OF PROFESSIONAL COURSE		
			First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	AyUG-SA1	First	3 PA & First TT	3 PA & Second TT	3 PA &UE
	PA: Periodical Assessment; TT: Term Test; UE: University Examinations				

6 C - Calculation Method for Internal assessment Marks (15 Marks)

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 15 marks.							

6 D - Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	**Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.**
2.	Practical / Clinical Performance

3.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
4.	Open Book Test (Problem Based)
5.	Summary Writing (Research Papers/ Samhitas)
6.	Class Presentations; Work Book Maintenance
7.	Problem Based Assignment
8.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
9.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
10.	Small Project

6 E - Paper Layout

I PROFESSIONAL BAMS EXAMINATIONS

AyUG-SA1

Time: 3 Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

TOTAL MARKS 100

		Number of Questions	Marks per question	Total Marks
Q 1	Multiple Choice Questions (MCQ)	20	1	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Long answer questions (LAQ)	4	10	40
				100

6 F - Disribution of Theory Exam

	AyUG-SA1			**D** **Type of Questions** **"Yes" can be asked.** **"No" should not be asked.**		
	A **List of Topics**	**B** **Term**	**C** **Marks**	**MCQ** **(1 Mark)**	**SAQ** **(5 Marks)**	**LAQ** **(10 Marks)**
1.	Introduction to Samhita-	**1**		No	/NO	NO
Ashtang Hriday Samhita - Sutrasthan (1-15 Adhyaya) 50 marks						
2.	AH Su.1. Ayushkamiya Adhyaya	**1**	50	YES	YES	YES

3.	AH Su.2. Dinacharya Adhyaya	**1**		YES	YES	YES
4.	AH Su.3. Rutucarya Adhyaya	**1**		YES	YES	YES
5.	AH Su.4. Roganutpadaniya Adhyaya	**I**		YES	YES	YES
6.	AH Su.5. Dravadravya Vijnaniya Adhyaya	**I**		NO	YES	NO
7.	AH Su.6. Annaswaroopa Vijnaneeya Adhyaya	**II**		NO	YES	NO
8.	AH Su.7. Annaraksha Adhyaya	**II**		NO	YES	NO
9.	AH Su.8. Matrashitiya Adhyaya	**II**		YES	YES	YES
10.	AH Su.9. Dravyaadi Vijnaniya Adhyaya	**II**		YES	YES	YES
11.	AH Su.10.Rasabhediya Adhyaya	**II**		YES	YES	YES
12.	AH Su.11.Doshadi Vijnaniya Adhyaya	**III**		YES	YES	YES
13.	AH Su.12.Doshabhediya Adhyaya	**III**		YES	YES	YES
14.	AH Su.13.Doshopakramaniya Adhyaya	**III**		YES	YES	YES
15.	AH Su.14.Dvividhopakramaniya Adhyaya	**III**		YES	YES	YES
16.	AH Su.15.Shodhanadigana Sangraha Adhyaya	**III**		NO	NO	NO
Charak Samhita – Sutrasthan (1-12 Adhyaya):						
17.	CS S 1. Deerghanjiviteeya Adhyaya-	1		YES	YES	YES
18.	CS S 2. Apamarga Tanduliya Adhyaya-	II		NO	YES	NO
19.	CS S 3. Aragvadhiya Adhyaya-	II		NO	YES	NO
20.	CS S 4. Shadvirechana-shatashritiya Adhyaya-	II		NO	YES	NO
21.	CS S 5. Matrashiteeya Adhyaya-	II		YES	YES	YES
22.	CS S 6. Tasyashiteeya Adhyaya-	II	**50**	YES	YES	YES
23.	CS S 7. Naveganadharaniya Adhyaya-	II		YES	YES	YES
24.	CS S 8. Indriyopakramaniya Adhyaya-	II		YES	YES	YES
25.	CS S 9. Khuddakachatushpada Adhyaya-	II		YES	YES	YES
26.	S 10. Mahachatushpada Adhyaya-	II		YES	YES	YES
27.	S 11. Tisraishaniya Adhyaya-	III		YES	YES	YES
28.	S 12. Vatakalakaliya Adhyaya-	III		YES	YES	YES

6 G - Question paper blue print

A **Question Sr. No**	**B** **Type of Question**	**C** **Question Paper Format** **50 marks AH/S** **50 Marks CS/S**
.Q1	**Multiple choice Questions**	1. Topic number 2 (A.H.Su.Ch.1)

	(MCQ) 20 Questions 1 mark each All compulsory From Must know part 15 MCQ From Desirable to know 3 MCQ From Nice to know 2 MCQ	2. Topic number 3 (A.H.Su.Ch.2) 3. Topic number 4 (A.H.Su.Ch.3) 4. Topic number 5 (A.H.Su.Ch.4) 5. Topic number 9 (A.H.Su.Ch.8) 6. Topic number 10 (A.H.Su.Ch.9) 7. Topic number 11 (A.H.Su.Ch.10) 8. Topic number 12 (A.H.Su.Ch.11) 9. Topic number 13 (A.H.Su.Ch.12) 10. Topic number 14 (A.H.Su.Ch.13) 11. Topic number 15 (A.H.Su.Ch.14) 12. Topic number 17 (C.S.Su.Ch.1) 13. Topic number 21 (C.S.Su.Ch.5) 14. Topic number 22 (C.S.Su.Ch.6) 15. Topic number 23 (C.S.Su.Ch.7) 16. Topic number 24 (C.S.Su.Ch.8) 17. Topic number 25 (C.S.Su.Ch.9) 18. Topic number 26 (C.S.Su.Ch.10) 19. Topic number 27 (C.S.Su.Ch.11) 20. Topic number 28 (C.S.Su.Ch.12)
Q2	**Short answer Questions (SAQ)** Eight Questions 5 Marks Each All compulsory Must know 7, Desirable to know 1 No Questions on Nice to know	1. Topic no. 2 (A.H.Su.Ch.1) / Topic no. 25 (C.S.Su.Ch.9)/ Topic number 26 (C.S.Su.Ch.10) 2. Topic no. 3(A.H.Su.Ch.2) / Topic no. 9(A.H.Su.Ch.8) / Topic no. 21(C.S.Su.Ch.5) / Topic no. 24 (C.S.Su.Ch.8) 3. Topic no. 4 (A.H.Su.Ch.3) / Topic no. 22 (C.S.Su.Ch.6) / Topic no. 5 (A.H.Su.Ch.4) / Topic no. 23 (C.S.Su.Ch.7)/ 4. Topic no. 12 (A.H.Su.Ch.11) / Topic no. 13 (A.H.Su.Ch.12)/ Topic no.28 (C.S.Su.Ch.12) 5. Topic no. 17 (C.S.Su.Ch.1) 6. Topic no. 6 (A.H.Su.Ch.5)/ Topic no.7 (A.H.Su.Ch.6)/ Topic no.18 (C.S.Su.Ch.2)/ Topic no.19 (C.S.Su.Ch.3) / Topic no.20 (C.S.Su.Ch.04) / Topic no.16 (A.H.Su.Ch.15) 7. Topic no.8 (A.H.Su.Ch.7) /Topic no. 10 (A.H.Su.Ch.9) / Topic no.11 (A.H.Su.Ch.10)/ 8. Topic no. 14 (A.H.Su.Ch.13) Topic no.15 (A.H.Su.Ch.14)/ Topic no. 27 (C.S.Su.Ch.11)
Q3	**Long answer Questions (LAQ)** Four Questions 10 marks each All compulsory	1. Topic no. 2 (A.H.Su.Ch.1) / Topic no. 17 (C.S.Su.Ch.1)/ Topic no. 25 (C.S.Su.Ch.9)/ Topic number 26 (C.S.Su.Ch.10) 2. Topic no.3(A.H.Su.Ch.2) / Topic no. 4 (A.H.Su.Ch.3)/ Topic no. 21(C.S.Su.Ch.5) / Topic no. 22 (C.S.Su.Ch.6)

	All questions on Must to know. No Questions on Nice to know and Desirable to know	3. Topic no. 12 (A.H.Su.Ch.11) / Topic no. 13 (A.H.Su.Ch.12)/ Topic no. 14 (A.H.Su.Ch.13)/ Topic no.15 (A.H.Su.Ch.14) / Topic no.28 (C.S.Su.Ch.12) 4. Topic no. 9(A.H.Su.Ch.8)/ Topic no. 10 (A.H.Su.Ch.9) / Topic no.11 (A.H.Su.Ch.10)/ Topic no. 27 (C.S.Su.Ch.11)/ Topic no.5 (A.H.Su.Ch.4)/ Topic no. 23 (C.S.Su.Ch.7)

6 H - Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10 (Set-FC) + IA 15) Marks

SN		**Heads**	Marks
A		**Viva (75 Marks)**	
	1	Viva on Record Book (of yearly conducted non lecture activities) (Refer Table 5)	15
	2	Viva on Shloka Book and Shloka Recitation (Ref table 3. Recitation)	10
	3	Identification of Tantrayukti Viva on .Introduction to Samhita (ref Table 2: 1)	15
	4	Viva Voce on AH	15
	5	Viva Voce on Ch Su	15
	6	Communication Skill	05
B		**Internal Assessment**	15
C		**Electives**	10
	Total Marks		**100**

7. Reference books/Resourses

- **Introduction to Samhita**

1. Ashtanghridayam with the commentaries ‘Sarvangasundara’ of Arundatta and ‘Ayurvedarasayana’ of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Sushruta Samhita by Dr. Ambikadutta Shastri
3. Ayurvedeeya Padartha Vijnaan by Prof. C. R. Agnivesh
4. Ayurvedeeya Padartha Vijnaan and Ayurvedeeya itihaasam by Prof. C. R. Agnivesh
5. Ayurvediya Padarth Vidnyan by Vd. Ranjit Rai Desai
6. History of Medicine in India by Aacharya Priyavrat Sharma
7. History of Indian Medicine by J. Jolly

- **Ashtang Hridaya**

1. Ashtanghridayam with the commentaries ‘Sarvangasundara’ of Arundatta and ‘Ayurvedarasayana’ of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Ashtanga Hridaya : English commentary by Dr. T. Shreekumar
3. Ashtanga Hridaya : English commentary by Dr. Vishwavasu Gaur
4. Ashtang Hridayam : English translation by Prof. K.R. Srikantha Murthy
5. Ashtanga Hridaya –English translation by Vd. Anantram Shastri
6. Ashtanga Hridayam by Dr. B. Ramarao
7. Illustrated Ashtanga Hridaya text with English Translation by Dr. R. Vidyanath
8. Ashtanga Hridaya: Hindi commentary by Lalchanda Vaidya
9. Ashtanga Hridaya: Hindi commentary by Vd. B.L.Gaur

- **Charak Samhita**

1. Charakasamhita by Agnivesha Revised by Charaka and Dridhbala with the Ayurveda Dipika commentary of Chakrapanidatta Edited by Vaidya Yadavji Trikamji Acharya
2. Charak Samhita (English Commentary): Dr. Ram Karan Sharma and Vd. Bhagwan Dash or Aacharya Priyavrata Sharma
3. Charak Samhita with translation of Chakrapani commentary by Harishchandra Kushvaha
4. Charak Samhita by Aacharya P.V.Sharma
5. Charak Samhita (Hindi commentary): Vaidya Jayadev Vidyalankar
6. Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar
7. Charak Samhita (Hindi commentary): Prof. Gorakhanath Chaturvedi and Kashinath Shastri
8. Charak Samhita (Hindi commentary): Dr. Brahmanand Tripathi
9. Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi
10. Charaka Samhita –Ayurveda Dipika Commentary- Hindi translation by Dr. B.L.Gaur
11. Legacy of Charak – M S Valiathan
12. Charak e-Samhita –National Institute of Indian Medical Heritage – http://niimh.nic.in/ebooks/ecaraka
13. Charakasamhitaonline.com- Charak Samhita New Edition (carakasamhitaonline.com)

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-17022022-233547
CG-DL-E-17022022-233547

असाधारण
EXTRAORDINARY

भाग III—खण्ड 4
PART III—Section 4

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 93] नई दिल्ली, बुधवार, फरवरी 16, 2022/माघ 27, 1943
No. 93] NEW DELHI, WEDNESDAY, FEBRUARY 16, 2022/MAGHA 27, 1943

भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग

अधिसूचना

नई दिल्ली, 16 फरवरी, 2022.

सं. बी.ओ.ए./विनियम/यूजी/7–10/2021.—भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग अधिनियम, 2020 (2020 का 14) के लिए राष्ट्रीय आयोग की धारा 55 की उप–धारा (2) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, और भारतीय चिकित्सा केंद्रीय परिषद् (भारतीय चिकित्सा में शिक्षा के न्यूनतम मानक) विनियमन, 1986 के अधिक्रमण में, सिवाय ऐसे अधिक्रमण से पहले किया गया है या किए जाने का लोप किया गया है, आयोग केन्द्र सरकार की पूर्व स्वीकृति से निम्न विनियमों का निर्माण करती है, यथाः–

1. **संक्षिप्त शीर्षक और प्रारंभ**–

(1) इन विनियमों को भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग स्नातकीय आयुर्वेद शिक्षा के न्यूनतम मानक) विनियम, 2022 कहा जाएगा।.

(2) ये विनियम सरकारी राजपत्र में उनके प्रकाशन की तिथि से प्रभावी होंगे।

2. **परिभाषाएँ**–

(1) इन विनियमों में, जब तक कि संदर्भ को अन्यथा अपेक्षित न हो, –

(i) "अधिनियम" का अर्थ है भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग, अधिनियम, 2020 (2020 का 14) अभिप्रेत है।

(ii) "अनुलग्नक" का अर्थ इन विनियमों के साथ संलग्न एक अनुलग्नक हो;

(iii) "परिशिष्ट" का अर्थ इन विनियमों में संलग्न एक परिशिष्ट है।

(2) यहाँ प्रयुक्त और परिभाषित नहीं किए गए परन्तु अधिनियम में परिभाषित नहीं किए गए शब्दों और अभिव्यक्तियों के वही अर्थ होंगे जो क्रमशः उन्हें अधिनियम में सौंपे गए हैं।

3. **बैचलर ऑफ आयुर्वेदिक मेडिसीन एण्ड सर्जरी प्रोग्राम**– आयुर्वेदिक शिक्षा मे स्नातक अर्थात् बैचलर ऑफ आयुर्वेदिक मेडिसीन एण्ड सर्जरी (बी.ए.एम.एस.) स्नातकों का निर्माण करेगा, जिसमें स्वास्थ्य देखभाल सेवाओं के लिए

एक कुशल चिकित्सकों और सर्जनों के रूप में आयुर्वेद के क्षेत्र में समकालीन प्रगति के साथ–साथ व्यापक व्यावहारिक प्रशिक्षण के साथ आधुनिक विज्ञान और प्रौद्योगिकी में वैज्ञानिक और तकनीकी प्रगति के ज्ञान के साथ अष्टांग आयुर्वेद का गहन ज्ञान होगा,

4. अष्टांग आयुर्वेद–

(ए) अष्टांग आयुर्वेद का अर्थ आयुर्वेद की आठ नैदानिक विशेषताओं अर्थात् कायचिकित्सा (सामान्य/आंतरिक चिकित्सा), शल्यतंत्र (शल्य चिकित्सा), शालाक्य तंत्र (नेत्र विज्ञान, ओटो–राइनो–लैरिंगोलॉजी और मुख–दंत चिकित्सा), कौमारभृत्य (प्रसूति और पेडियाट्रिक्स), अगदतंत्र (नैदानिक विष विज्ञान), भूत विद्या (नैदानिक सूक्ष्म जीव विज्ञान, नैदानिक मनोविज्ञान और मनोचिकित्सा), रसायन (निवारक, प्रोमोटिव, कायाकल्प चिकित्सा और जरा विज्ञान) और वाजीकरण (प्रजनन चिकित्सा और एपिजेनेटिक्स)।

(बी) खंड (ए) में उल्लेखित सभी आठ विशिष्टताओं को संबंधित विशेषताओं की सभी प्रकार की नैदानिक समस्याओं से निपटने के लिए विकसित किया गया था, अर्थात, सामान्य तौर पर नैदानिक शरीर रचना विज्ञान, शरीर क्रिया सहित उनके इटिओपैथोजेनेसिस शारीरिक, मनोवैज्ञानिक, बाहरी (चोट, रोगाणुओं, प्राकृतिक आपदाओं आदि), आहार संबंधी कारकों, दोषपूर्ण जीवन शैली, आनुवांशिक कारणों (जन्मजात, वंशानुगत) आदि के संदर्भ में प्रेरक कारक नैदानिक अभिव्यक्ति, जैविक तरल पदार्थों की परीक्षा/विश्लेषण/स्राव/उत्सर्जन/स्कोपी सहित विभिन्न नैदानिक उपकरण (नाडीयंत्र), नैदानिक मानदंड, पूर्व–सूचना, निवारक, प्रोमोटिव, उपचारात्मक, प्रशामक और शल्य चिकित्सा सहित पुनर्वास प्रबंधन के संदर्भ में प्रबंधन के सिद्धांतों सहित विभिन्न नैदानिक उपकरण फार्माको–थेराप्यूटिक्स के साथ–साथ संबंधित दवाओं और योगों के फार्मास्युटिक्स, भौतिक चिकित्सा तकनीकों जैसे कि बंधन, वेष्टन आदि सहित प्रासंगिक चिकित्सीय प्रक्रियाएं, प्रशासन के उनके तरीके, जटिलताओं और प्रबंधन, आहार और जीवन शैली के नियम उस विशेष नैदानिक स्थिति के संबंध में सुधार/उपचार, पुनरावृत्ति के कारणों आदि के मूल्यांकन की विधियां।

(सी) खंड (ए) में उल्लेखित विशिष्टताएं उन यंत्र/ उपकरण से भी संबंधित हैं जो विभिन्न चिकित्सीय प्रक्रियाओं/शल्य–चिकित्सा और अन्य प्रक्रियाओं के प्रशासन के लिए अपेक्षित हैं, उनके उपयोग और अनुरक्षण के तरीकों से भी संबंधित हैं। अस्पताल वास्तुकला, भूनिर्माण, वातानुकूलन और मानव संसाधन प्रबंधन, आदर्श रोगी गुणों सहित नर्सिंग स्टाफ के गुण समेत।

(डी) चिकित्सा शिक्षा के लिए छात्र चयन प्रक्रिया, चिकित्सा विज्ञान के अध्ययन के तरीके, मॉडलों पर नैदानिक कौशल के प्रशिक्षण सहित शिक्षण विधियां, छात्रों, चिकित्सा चिकित्सकों के साथ–साथ शिक्षकों के लिए आचार संहिता, छात्र मूल्यांकन विधियां, डिग्री प्रदान करना, शपथ प्रशासन, चिकित्सा पंजीकरण आदि।

5. प्रवेश के लिए पात्रता मानदंड–

(1) आयुर्वेद शिक्षा में स्नातक में प्रवेश प्राप्त करने हेतु पात्रता निम्नवत् होगी–

(ए) अभ्यर्थी ने भौतिकी, रसायन विज्ञान, जीव विज्ञान के साथ किसी भी मान्यता प्राप्त बोर्ड से 10 + 2 या इसके समकक्ष परीक्षा उत्तीर्ण की होगी और सामान्य श्रेणी के मामले में भौतिकी, रसायन विज्ञान और जीव विज्ञान में एक साथ लिए गए न्यूनतम पचास प्रतिशत अंक और अनुसूचित जातियों, अनुसूचित जनजातियों और अन्य पिछड़े वर्गों के मामले में चालीस प्रतिशत अंक प्राप्त किए होंगे:

बशर्ते कि विकलांग व्यक्तियों के अधिकार अधिनियम, 2016 (2016 का 49) के तहत निर्दिष्ट विकलांग उम्मीदवारों के संबंध में, उक्त परीक्षाओं में न्यूनतम योग्यता अंक पैंतालीस प्रतिशत होंगे सामान्य श्रेणी के मामले में और चालीस प्रतिशत अनुसूचित जातियों, अनुसूचित जनजातियों और अन्य पिछड़े वर्गों के मामले में।

(बी) किसी भी उम्मीदवार को बी.ए.एम.एस. डिग्री कार्यक्रम में तब तक प्रवेश नहीं दिया जाएगा जब तक कि उम्मीदवार ने पाठ्यक्रम के पहले वर्ष में प्रवेश के वर्ष के 31 दिसंबर को या उससे पहले 17 वर्ष की आयु प्राप्त नहीं कर लेता और पाठ्यक्रम के पहले वर्ष में प्रवेश के वर्ष के 31 दिसंबर को पच्चीस वर्ष से अधिक नहीं हो गया हो:

बशर्ते कि अनुसूचित जाति, अनुसूचित जनजाति, अन्य पिछड़े वर्गों और शारीरिक रूप से विकलांग उम्मीदवारों के मामले में ऊपरी आयु–सीमा में पांच वर्ष की छूट दी जा सकती है।

(2) राष्ट्रीय पात्रता–सह–प्रवेश परीक्षा–

(i) स्नातक स्तर पर सभी चिकित्सा संस्थानों के लिए एक समान प्रवेश परीक्षा होगी, अर्थात् प्रत्येक शैक्षणिक वर्ष में स्नातक पाठ्यक्रम में प्रवेश के लिए राष्ट्रीय पात्रता–सह–प्रवेश परीक्षा (एन.ई.ई.टी.) और भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा अधिकृत एक संस्थान इस परीक्षा को आयोजित करेगा।

(ii) एक शैक्षणिक वर्ष के लिए स्नातक पाठ्यक्रम में प्रवेश हेतु उम्मीदवार को उक्त शैक्षणिक वर्ग के लिए आयोजित स्नातक पाठ्यक्रम के लिए राष्ट्रीय योग्यता प्रवेश परीक्षा में 50 प्रतिशत पर न्यूनतम अंक प्राप्त करना आवश्यक होगा।

बशर्ते कि निम्न के संबंध में –

(i) अनुसूचित जाति, अनुसूचित जनजाति और अन्य पिछड़े वर्ग के उम्मीदवार को न्यूनतम 40 प्रतिशत अंक प्राप्त करने होंगे।

(ii) विकलांग व्यक्तियों के अधिनियम, 2016 (2016 का 49) के अधिकार के तहत् सामान्य श्रेणी के उम्मीदवारों को न्यूनतम अंक 45 प्रतिशत प्राप्त करने होंगे और अनुसूचित जाति, अनुसूचित जनजाति और अन्य पिछड़े वर्ग को 40 प्रतिशत अंक प्राप्त करने होंगे।

बशर्ते कि जहां संबंधित श्रेणियों में उम्मीदवारों की पर्याप्त संख्या स्नातकीय पाट्यक्रम में प्रवेश के लिए किसी भी शैक्षणिक वर्ष के लिए आयोजित राष्ट्रीय योग्यता – सह – प्रवेश परीक्षा में निर्धारित न्यूनतम अंक प्राप्त करने में विफल रहती है, तो राष्ट्रीय आयोग भारतीय चिकित्सा पद्धति केंद्र सरकार के परामर्श तथा अपने विवेक से संबंधित श्रेणियों के अभ्यर्थियों के लिए स्नातकीय पाठ्यक्रम में प्रवेश हेतु आवश्यक न्यूनतम अंकों को कम करने का निर्णय ले सकते हैं केंद्र सरकार द्वारा इस प्रकार कम किए गए अंक केवल उस शैक्षणिक वर्ष के लिए लागू होंगे।

(3) राष्ट्रीय पात्रता प्रवेश परीक्षा में प्राप्त अंकों के आधार पर पात्र अभ्यर्थियों की एक अखिल भारतीय सामान्य योग्यता क्रमसूची एवं राज्यवार योग्यता क्रमसूची तैयार की जाएगी तथा स्नातकीय पाठ्यक्रम हेतु अभ्यर्थियों, संबंधित श्रेणियों के अन्तर्गत, का प्रवेश मात्र इन सूचियों से होगा।

(4) सरकार, सरकारी सहायता प्राप्त संस्थानों और निजी संस्थानों में प्रवेश के लिए सीट मैट्रिक्स अखिल भारतीय कोटा के लिए 15 प्रतिशत और राज्य और संघ राज्य क्षेत्र के लिए 85 प्रतिशत होगाः

बशर्ते कि, –

(i) सरकारी और निजी दोनों ही प्रकार के सभी सम–विश्वविद्यालयों में प्रवेश के प्रयोजनार्थ अखिल भारतीय कोटा शत–प्रतिशत होगा।

(ii) उन विश्वविद्यालय एवं संस्थानों में, कोटे के रख रखाव हेतु जिसमें पहले से ही 15 प्रतिशत से अधिक अखिल भारतीय कोटा सीटें जारी रहेंगी।

(iii) सरकारी और सरकारी अनुदानित संस्थानों में वार्षिक स्वीकृत प्रवेश क्षमता का 5 प्रतिशत विकलांग व्यक्तियों के अधिकार अधिनियम, 2016 (2016 का 49) के प्रावधानों के अनुसार और राष्ट्रीय पात्रता–सह–प्रवेश परीक्षा की मेरिट सूची के आधार पर निर्दिष्ट विकलांगता वाले उम्मीदवारों द्वारा भरा जाएगा।

स्पष्टीकरण.– इस खंड के प्रयोजन हेतु, परिशिष्ट "ए" में निर्दिष्ट दिव्यांगजन अधिकार अधिनियम, 2016 (2016 का 49) की अनुसूची में निहित विशिष्ट विकलांगता और निर्दिष्ट विकलांगता के साथ भारतीय चिकित्सा प्रणालियों में एक कार्यक्रम को आगे बढ़ाने के लिए उम्मीदवार की पात्रता परिशिष्ट "बी" में निर्दिष्ट दिशानिर्देशों के अनुसार होगी। और यदि किसी विशेष श्रेणी में विकलांग व्यक्तियों के लिए आरक्षित सीटें उम्मीदवारों की अनुपलब्धता के कारण खाली रहती हैं, तो सीटों को संबंधित श्रेणी के लिए वार्षिक स्वीकृत सीटों में शामिल किया जाएगा।

(5) (i) राज्य सरकार, विश्वविद्यालय, न्यास, सोसाइटी, अल्पसंख्यक संस्था, निगम या कंपनी द्वारा स्थापित संस्थानों सहित राज्यों और संघ राज्य क्षेत्रों में सभी आयुर्वेद शैक्षिक संस्थानों में स्नातक पाठ्यक्रम में प्रवेश के लिए राज्य और संघ शासित क्षेत्र कोटा की काउंसलिंग के लिए नामित प्राधिकारी संबंधित राज्य या संघ शासित क्षेत्र के प्रासंगिक नियमों और विनियमों के अनुसार संबंधित राज्य या संघ शासित क्षेत्र होगा, जैसा भी मामला हो।

(ii) समस्त सरकारी तथा गैर सरकारी मानित विश्वविद्यालयों की 100% सीटों हेतु बैचलर ऑफ आयुर्वेद मेडीसिन एण्ड सर्जरी पाठ्यक्रम में सभी प्रवेशों के लिए काउंसलिंग केन्द्रीय सरकार द्वारा नामित प्राधिकारी द्वारा आयोजित कराई जाएगी।

(6) केन्द्रीय सरकार द्वारा स्थापित समस्त आयुर्वेद शिक्षण संस्थानों एवं अखिल भारतीय कोटा के अन्तर्गत सीटों हेतु बैचलर ऑफ आयुर्वेद मेडीसिन एण्ड सर्जरी पाठ्यक्रम में सभी प्रवेशों के लिए काउंसलिंग केन्द्रीय सरकार द्वारा नामित प्राधिकारी द्वारा आयोजित कराई जाएगी।

(7) (i) विदेशी नागरिकों को छोड़कर श्रेणी (केंद्रीय कोटा, राज्य कोटा या प्रबंधन आदि) की परवाह किए बिना सभी सीटें केवल परामर्श (केंद्रीय, राज्य या केंद्र शासित प्रदेश) के माध्यम से दी जानी हैं। ऊपर निर्दिष्ट के अलावा किसी अन्य माध्यम से सीधे प्रवेश को मंजूरी नहीं दी जाएगी।

(ii) संस्थानों को एनसीआईएसएम द्वारा निर्दिष्ट प्रारूप में प्रवेश दिए गए छात्रों की सूची सत्यापन के लिए समय–समय पर एनसीआईएसएम द्वारा निर्दिष्ट प्रवेश के लिए कट ऑफ तिथि पर शाम 6 बजे या उससे पहले जमा करनी होगी।

(iii) विश्वविद्यालय उन उम्मीदवारों (विदेशी नागरिकों को छोड़कर) के प्रवेश को मंजूरी देंगे जिन्हें काउंसिलिंग (केंद्र, राज्य या केंद्र शासित प्रदेश जैसा भी मामला हो) के माध्यम से आवंटित किया गया है।

(8) कोई भी उम्मीदवार जो इस विनियम के तहत न्यूनतम पात्रता अंक प्राप्त करने में विफल रहा है, उसे उक्त शैक्षणिक वर्ष में स्नातक कार्यक्रम में प्रवेश नहीं दिया जाएगा।

(9) प्रवेश के संबंध में इन विनियमों में निर्धारित मानदंड या प्रक्रिया के उल्लंघन में कोई भी प्राधिकरण या संस्थान किसी भी उम्मीदवार को स्नातक कार्यक्रम में प्रवेश नहीं देगा और उक्त मानदंड या प्रक्रिया के उल्लंघन में किए गए किसी भी प्रवेश को भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग के द्वारा तत्काल रद्द कर दिया जाएगा।

(10) प्राधिकरण या संस्थान जो इन विनियमों में निर्धारित मानदंडों या प्रक्रिया के उल्लंघन में किसी भी छात्र को प्रवेश देता है, अधिनियम के प्रासंगिक प्रावधानों के तहत तदनुसार उत्तरदायी होगा।

(11) विदेशी छात्रों के लिए कोई भी अन्य समकक्ष अर्हता जो कि सम्बन्धित प्राधिकारी द्वारा अनुमोदित हो, की स्वीकृति होगी तथा और विनियमन 5 का उप–विनियमन (2) उक्त विदेशी छात्रों पर लागू नहीं होगा।

6. **बी.ए.एम.एस पाठ्यक्रम की अवधि**– बी.ए.एम.एस पाठ्यक्रम की अवधि निम्नलिखित तालिका के अनुसार 5 वर्ष और 6 महीने होगी, अर्थात्–

प्रोग्राम–1
(बी.ए.एम.एस. पाठ्यक्रम की अवधि)

क्रम संख्या	बी.ए.एम.एस. का पाठ्यक्रम	अवधि
(ए)	प्रथम व्यावसायिक बी.ए.एम.एस.	अट्ठारह महीने
(बी)	द्वितीय व्यावसायिक बी.ए.एम.एस.	अट्ठारह महीने
(सी)	तृतीय (अंतिम) व्यावसायिक बी.ए.एम.एस.	अट्ठारह महीने
(डी)	अनिवार्य परिभ्रामीविशिखानुप्रवेश	बारह महीने

7. **प्रदान की जाने वाली उपाधि**–अभ्यार्थी को सभी परीक्षाओं को पास करने और निर्धारित अवधि में विस्तारित अध्ययन के निर्धारित पाठ्यक्रम को पूरा करने और निर्धारित अवधि में विस्तारित अध्ययन के निर्धारित पाठ्यक्रम को पूरा करने के बाद आयुर्वेदाचार्य (बैचलर ऑफ़ आयुर्वेदिक मेडिसिन एंड सर्जरी –बी.ए.एम.एस.) की डिग्री से सम्मानित किया जाएगा और डिग्री का नामकरण आयुर्वेदाचार्य (आयुर्वेदिक चिकित्सा एवं शल्य चिकित्सा मे स्नातक बैचलर ऑफ़ आयुर्वेदिक मेडिसिन एंड सर्जरी –बी.ए.एम.एस.) होगा।

8. **शिक्षा का माध्यम**– कार्यक्रम के लिए शिक्षा का माध्यम संस्कृत या हिंदी या कोई मान्यताप्राप्त क्षेत्रीय भाषा या अंग्रेजी होगाः बशर्ते कि यदि कोई संस्थान विभिन्न राज्यों या अंतर्राष्ट्रीय छात्रों को प्रवेश दे रहा है, तो शिक्षा का माध्यम अंग्रेजी होगा।

9. **अध्ययन का माध्यम**–

(1) बी.ए.एम.एस प्रोग्राम में मुख्य प्रोग्राम और ऐच्छिक शामिल होंगे और अध्ययन के माध्यम का निम्नलिखित तरीके से पालन किया जाएगा, अर्थात् –

(ए) (i) (ए) प्रवेश के पश्चात् छात्र को संक्रमणकालीन पाठ्यक्रम पर आधारित कम से कम 15 कार्यदिवसों के एक प्रस्तावना कार्यक्रम के माध्यम से बी.ए.एम.एस. पाठ्यक्रम में प्रतिष्ठापित किया जाएगा। जिसका उद्देश्य नये प्रवेश प्राप्त छात्रों को आयुर्वेद से परिचित कराना है तथा उन्हें उस पाठ्यक्रम के लिए अध्ययन करने वाले बी.ए.एम. एस. कार्यक्रम से अच्छी तरह से अवगत कराना है।

(बी) प्रस्तावना कार्यक्रम के दौरान, आयुर्वेद के विद्यार्थी को पाठ्यक्रम में यथा निर्धारित अन्य विषयों के साथ–साथ आयुर्वेद के लिए संस्कृत की बुनियादी शिक्षा और बुनियादी जीवन सहायता और प्राथमिक चिकित्सा सीखेंगे।

(सी) पन्द्रह दिन का प्रस्तावना कार्यक्रम होगा जो 90 घंटे से कम नहीं होगा और प्रत्येक दिन में 6 घंटे हो सकते हैं।

(ii) प्रत्येक व्यावसायिक सत्र के लिए कुल कार्य दिवस 320 दिनों से कम नहीं होंगे।

(iii) (ए) प्रथम व्यावसायिक सत्र के लिए कुल कार्य दिवस प्रस्तावना कार्यक्रम के लिए 15 दिनों को छोड़कर 305 दिनों से कम नहीं होंगे।

(बी) प्रथम व्यावसायिक सत्र के लिए कुल शिक्षण घंटे 1920 से कम नहीं होंगे।

(iv) द्वितीय व्यावसायिक सत्र के लिए कुल शिक्षण घंटे 2240 से कम नहीं होंगे और व्याख्यान से गैर–व्याख्यान में अध्यापन के घंटों का अनुपात 1 : 2 होगा।

(v) तीसरे (अंतिम) व्यावसायिक सत्र के लिए कुल शिक्षण घंटे 2240 से कम नहीं होंगे और तीसरे (अंतिम) व्यावसायिक सत्र के दौरान, प्रातः कालीन घंटों के दौरान अस्पताल में तीन घंटे की नैदानिक कक्षाएं आयोजित की जाएंगी और व्याख्यान से गैर–व्याख्यान घंटे में शिक्षण घंटों का अनुपात 1 : 2 होगा।

(vi) विश्वविद्यालय या संस्थान द्वारा अपेक्षित गतिविधियों को पूर्ण करने हेतु आवश्यकतानुसार शिक्षण के घंटों में वृद्धि की जा सकती है।

स्पष्टीकरणः– इस विनियमन के प्रयोजनों के लिए अभिव्यक्ति **"व्याख्यान"** का अर्थ है उपदेशात्मक शिक्षण यानी, कक्षा शिक्षण और अभिव्यक्ति **"गैर–व्याख्यान"** में व्यावहारिक/नैदानिक और प्रदर्शनकारी शिक्षण शामिल हैं और

प्रदर्शनात्मक शिक्षण में छोटे समूह शिक्षण/ट्यूटोरियल/सेमिनार/संगोष्ठी/असाइनमेंट/रोल प्ले/फार्मेसी प्रशिक्षण/प्रयोगशाला प्रशिक्षण/विच्छेदन/फील्ड विजिट/कौशल प्रयोगशाला प्रशिक्षण/एकीकृत शिक्षा/समस्या आधारित शिक्षण/मामले आधारित अधिगम/प्रारंभिक नैदानिक जोखिम/साक्ष्य आधारित अधिगम आदि विषय की आवश्यकता के अनुसार और गैर–व्याख्यानों में, नैदानिक/व्यावहारिक भाग सत्तर प्रतिशत होगा। और प्रदर्शनकारी शिक्षण तीस प्रतिशत होगा।

(**vii**) पुस्तकालय और शारीरिक शिक्षा के लिए प्रति सप्ताह कम से कम एक घंटा होगा और सभी बैचों की नियमित समय सारणी में प्रति माह एक घंटे का मनोरंजन (प्रतिभा की अभिव्यक्ति और पाठ्येतर गतिविधियों) का आबंटन किया जाना चाहिए।

(बी) प्रथम व्यावसायिक सत्र आमतौर पर अक्टूबर के महीने में शुरू होगा और निम्नलिखित विषयों को समय–समय पर भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा निर्धारित पाठ्यक्रम के अनुसार पढ़ाया जाएगा, अर्थातः –

तालिका–2
(प्रथम व्यावसायिक बी.ए.एम.एस. के लिए विषय)

क्रम संख्या	विषय कोड	विषय	समतुल्य शब्द
1	एवाईयूजी–एसएन एवं एआई	संकृतम एवं आयुर्वेद इतिहास	हिस्ट्री ऑफ़ आयुर्वेद
2	एवाईयूजी–पीवी	पदार्थ विज्ञान	फंडामैंटल प्रिंसिपल्स ऑफ आयुर्वेद और क्वांटम मैंकेनिक्स्
3	एवाईयूजी–केएस	क्रिया शारीर	ह्यूमन फिजियोलॉजी
4	एवाईयूजी–आरएस	रचनाशारीर	ह्यूमन एनाटोमी
5	एवाईयूजी–एसए 1	संहिता अध्ययन–1	स्टडी ऑफ़ आयुर्वेद क्लासिकल टेक्स्ट
6	ऐच्छिक (न्यूनतम तीन) विषय		

(सी) दूसरा व्यावसायिक सत्र आमतौर पर पहली व्यावसायिक परीक्षा पूरी होने के बाद अप्रैल के महीने में शुरू होगा और निम्नलिखित विषयों को समय–समय पर भारतीय चिकित्सा पद्धति के लिए राष्ट्रीय आयोग द्वारा निर्धारित पाठ्यक्रम के अनुसार पढ़ाया जाएगा, अर्थातः –

तालिका–3
(द्वितीय व्यावसायिक बीए.एम.एस के लिए विषय)

क्रम संख्या	विषय कोड	विषय	समतुल्य शब्द
1	एवाईयूजी–डीजी	द्रव्यगुण विज्ञान	फार्माकोलॉजी और मटेरिया मेडिका– हर्बल
2	एवाईयूजी–आरबी	रसशास्त्र एवं भैषज्यकल्पना	मटेरिया मेडिका– मिनरल्स और मैटल्स तथा और फार्मास्युटिकल विज्ञान
3	एवाईयूजी–आरएन	रोगनिदान एवं विकृति विज्ञान	मेथड्स ऑफ़ डायग्नोसिस, डायग्नोस्टिक प्रोसेदूरेस एंड पैथोलॉजी
4	एवाईयूजी–एटी	अगद्तंत्र एवं न्याय वैद्यक	क्लीनिकल टॉक्सिकोलॉजी एंड मेडिकल जुरीसप्रूडेंस
5	एवाईयूजी–एसए2	संहिता अध्ययन–2	स्टडी ऑफ़ आयुर्वेदा क्लासिकल टेक्स्ट
6	एवाईयूजी–एस डब्लू	स्वस्थवृत एंवम् योग	लाइफस्टाइल मैनेजमेंट, पब्लिक हेल्थ एंड योग
7	ऐच्छिक (न्यूनतम तीन) विषय		

(डी) तीसरा (अंतिम) व्यावसायिक सत्र सामान्यतया द्वितीय व्यावसायिक परीक्षा के पूरा होने के बाद अक्टूबर के महीने में शुरू होगा और निम्नलिखित विषयों को समय–समय पर भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा निर्धारित पाठ्यक्रम के अनुसार पढ़ाया जाएगा, अर्थातः –

तालिका–4
(तीसरा (अंतिम) व्यावसायिक बी ए.एम.एस के लिए विषय)

क्रम संख्या	विषय कोड	विषय	समतुल्य शर्तें शब्द
1	एवाईयूजी–केसी	मानसरोग, रसायन और वाजीकरण सहित कायाचिकित्सा	इंटरनल मेडिसिन इन्क्लूडिंग साइकाइट्री, रेजुवेनटिवे मेडिसिन, रिप्रोडक्टिव मेडिसिन एंड एपिजेनेटिक्स
2	एवाईयूजी–पीके	पंचकर्म और उपकर्म	थेराप्यूटिक प्रोसीज़रल मैनेजमेंट
3	एवाईयूजी–एसटी	शल्य तंत्र	जनरल सर्जरी
4	एवाईयूजी–एसएल	शालाक्यतंत्र	ओफ्थल्मोलॉजी, ऑटो–राइनो–लैरिंगोलोजी
5	एवाईयूजी–पीएस	प्रसूति तंत्र एवं स्त्री रोग	गायनोकॉलोजी एंड आब्सटेट्रिक्स

6	एवाईयूजी–केबी	कौमारभृत्य	पेडिऐट्रिक्स
7	एवाईयूजी–एसए3	संहिता अध्ययन–3	स्टडी ऑफ़ आयुर्वेदा क्लासिकल टेक्स्ट
8	एवाईयूजी–ईएम	आत्ययिक चिकित्सा	इमरजेंसी मेडिसिन
9	एवाईयूजी–आरएम	अनुसंधान पद्धति और चिकित्सा–सांख्यिकी	
10	ऐच्छिक (न्यूनतम तीन) विषय		

(ई) विश्वविद्यालय, संस्था और महाविद्यालय अनुलग्नक–3 में इन विनियमों में दिए गए अनंतिम शैक्षणिक कैलेंडर के टेम्पलेट के अनुसार उस विशेष बैच का शैक्षणिक कैलेंडर तैयार करेंगे और इसे छात्रों को परिचालित किया जाएगा और संबंधित वेबसाइटों में उपयोग के लिए उपलब्ध किया जाएगा और तदनुसार पालन किया जाएगा।

(एफ) बी.ए.एम.एस. कार्यक्रम में निम्नलिखित विभाग और विषय शामिल होंगे, अर्थात

तालिका–5

(विभाग और विषय)

क्रम संख्या	विभाग	विषयों
01	संहिता सिद्धांत और संस्कृत	संकृतम
		आयुर्वेद इतिहास
		पदार्थ विज्ञान
		संहिता अध्ययन–1, 2, 3
02	रचना शारीर	रचना शारीर
03	क्रिया शारीर	क्रिया शारीर
04	द्रव्यगुण	द्रव्यगुण विज्ञान
05	रसशास्त्र एवं भैषज्यकल्पना	रसशास्त्र एवं भैषज्यकल्पना
06	रोग निदान एवं विकृति विज्ञान	रोग निदान एवं विकृति विज्ञान
07	अगद तंत्र	अगद तंत्र एवं न्याय वैद्यक
08	स्वस्थवृत और योग	स्वस्थवृत एवं योग
		अनुसंधान पद्धति और चिकित्सा सांख्यिकी
09	कायचिकित्सा	मानस रोग, रसायन एवं वाजीकरण सहित कायचिकित्सा
		आत्ययिक चिकित्सा
10	पंचकर्म	पंचकर्म एवं उपकर्म
11	शल्य तंत्र	शल्य तंत्र
12	शालाक्यतंत्र	शालाक्यतंत्र
13	प्रसूति तंत्र एवं स्त्री रोग	प्रसूति तंत्र एवं स्त्री रोग
14	कौमारभृत्य	कौमारभृत्य

(जी) ऐच्छिक–

(i) आयुर्वेद के छात्रों को विभिन्न संबद्ध विषयों को शुरू करने, उजागर करने और उन्मुख करने का अवसर प्रदान करने के लिए बी.ए.एम. एस पाठ्यक्रम में ऐच्छिक विषय प्रस्तुत किए गए हैं, जिन्हें बहुविषयक दृष्टिकोण को समझने और बनाने के लिए आवश्यक है।

(ii) ऐच्छिक को ऑनलाइन पाठ्यक्रम के रूप में आयोजित किया जाएगा।

(iii) प्रत्येक ऐच्छिक विषय 45 घंटे की अवधि का होगा और 5 भाग में विभाजित होगा और प्रत्येक भाग में 9 घंटे होंगे अर्थात, 5 घंटे का शिक्षण, 2 घंटे का निर्देशित अध्ययन, विशेषज्ञ मार्गदर्शन /प्रतिक्रिया और मूल्यांकन के लिए प्रत्येक में 1–1 घंटा और कुल मिलाकर, प्रत्येक ऐच्छिक में 25 घंटे का शिक्षण, 10 घंटे का निर्देशित अध्ययन होगा तथा विशेषज्ञ मार्गदर्शन /प्रतिक्रिया के 5 घंटे और मूल्यांकन के 5 घंटे (प्रत्येक एक घंटे के 5 आकलन)।

स्पष्टीकरण– इस विनियमन के उद्देश्य के लिए, शिक्षण का अर्थ है वीडियो व्याख्यान, पावर पॉइंट प्रस्तुतियां, ऑडियो व्याख्यान, वीडियो क्लिपिंग, ऑडियो क्लिपिंग, तकनीकी छवियां, अध्ययन सामग्री आदि।

(iv) इन विनियमों के अंतर्गत ऐच्छिक के लिए अध्ययन के घंटे बी.ए.एम. एस के निर्धारित शिक्षण घंटों से अधिक हैं।

(एच) नैदानिक प्रशिक्षण–

(i) छात्र का नैदानिक प्रशिक्षण प्रथम व्यावसायिक से प्रारम्भ होगा और संबंधित संकाय और विभाग द्वारा संबंधित अस्पताल में विषय की आवश्यकता के अनुसार गैर–व्याख्यान घंटे में विषय से संबंधित नैदानिक प्रशिक्षण प्रदान किया जाएगा–

(ए) पहले व्यावसायिक सत्र के दौरान, संहिता एवं सिद्धांत और क्रिया शारीर विभाग द्वारा बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी) के माध्यम से नैदानिक प्रशिक्षण प्रदान किया जाएगा, जिसमें उपर्युक्त विभागों के शिक्षक परामर्शदाता और स्क्रीनिंग ओपीडी है, जिसमें छात्र प्रकृति और सार मूल्यांकन, नाड़ी का अभ्यास, दोष वृद्धि क्षय लक्षणों की रिकॉर्डिंग, ऊंचाई की माप, वजन, बॉडी मास इंडेक्स (बीएमआई) आदि गतिविधियों की गणना में रहेंगे।

(ii) (ए) द्वितीय व्यावसायिक सत्र के लिए नैदानिक प्रशिक्षण विनियमन 9 के उप–विनियमन (1) के खंड क (iv) के अनुसार होगा और नैदानिक उपस्थिति संबंधित संकाय और विभाग द्वारा रखी जाएगी।

(बी) द्वितीय व्यावसायिक सत्र के लिए नैदानिक प्रशिक्षण निम्नानुसार विषयों की आवश्यकता के अनुसार प्रदान किया जाएगा–

(ए) (i) रोगनिदान विभाग विशेष क्लीनिक और बाह्य एवं अन्तः विभाग के माध्यम से नेदानिक प्रशिक्षण प्रदान करेगा जिसमें रोगनिदान विभाग के शिक्षक सलाहकार होंगे,

(ii) विष चिकित्सा बाह्य एवं अन्तः विभाग और बाह्य एवं अन्तः विभाग के माध्यम से अगद तंत्र विभाग,

(iii) स्वस्थ रक्षण बाह्य एवं अन्तः विभाग व बाह्य एवं अन्तः विभाग के माध्यम से स्वस्थवृत विभाग,

(बी) इसके अतिरिक्त, द्वितीय व्यावसायिक बी.ए.एम.एस. छात्रों को प्रिस्क्रिप्शन पैटर्न, दवा नाम, प्रपत्र, खुराक, औषध सेवन काल, अनुपान, सहपान, दवाओं के मिश्रण या कंपाउंडिंग की विधि आदि से परिचित होने के लिए चिकित्सा औषधालय में तैनात किया जाएगा। इसी तरह, आईपीडी पोषण मूल्यांकन में, पथ्य तैयारी इकाई या आहार केंद्र में विभिन्न पथ्य या चिकित्सीय आहार तैयारी से परिचित होंने के लिए।

(iii) विनियमन 9 के उप–विनियमन (1) के खंड क (अ) के अंतर्गत उल्लेखित तीसरे (अंतिम) व्यावसायिक सत्र के दौरान नैदानिक प्रशिक्षण (बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी)/ऑपरेशन थियेटर/लेबर रूम/पंचकर्म थेरेपी रूम) गैर–व्याख्यान/नैदानिक सत्र के अनुसार रोटेशन के आधार पर और निम्नलिखित विषयों के लिए निर्धारित नैदानिक/गैर–व्याख्यान शिक्षण घंटों के अनुसार होगा। अर्थात्–

(ए) कायचिकित्सा विभाग के अधीन कार्य कर रहे बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी) और विशेष क्लीनिक, यदि कोई हों;

(बी) पंचकर्म बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी), पंचकर्म चिकित्सा कक्ष जिसमें तैयारी कक्ष और किसी अन्य संबंधित विशेषता इकाइयों या क्लीनिक, यदि कोई हों, सहितय

(सी) शल्यतंत्र बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी), ऑपरेशन थियेटर (बृहत तथा लघु), खेल चिकित्सा, मर्मचिकित्सा, भग्नचिकित्सा आदि जैसी कोई भी विशेषता इकाइयांय

(डी) शालाक्य तंत्र नेत्र, ईएनटी, दंत चिकित्सा क्लिनिक, क्रियाकल्प और कोई अन्य संबंधित विशेष क्लिनिक, यदि कोई हो;

(ई) स्त्री रोग एवम प्रसूति बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी), प्रसव कक्ष, प्रक्रियात्मक कक्ष (योनि धावन, योनि धूपन, योनि पिचु, उत्तरबस्ति आदि), गर्भसंस्कार और अन्य संबंधित विशेषता क्लीनिक, यदि कोई हो;

(एफ) कौमारभृत्य बहिरंग रोगी विभाग (ओपीडी) और अन्तरंग रोगी विभाग (आईपीडी), बाल चिकित्सा पंचकर्म कक्ष और अन्य संबंधित विशेषता क्लीनिक, यदि कोई हो; और

(जी) संहिता और सिद्धांत मधुमेह, हृदय, मेदोरोग, स्थौल्य, अस्थि और संधि आदि जैसे विशिष्ट क्लीनिक/इकाइयां।

(iv) कायचिकित्सा, पंचकर्म, शल्यतंत्र, शालाक्यतंत्र, स्त्रीरोग एवं प्रसूति तंत्र, कौमारभृत्य, अगद तंत्र (विषचिकित्सा) और स्वस्थवृत्त और योग के अलावा अन्य विभागों से संबंधित शिक्षण स्टाफ संलग्न शिक्षण अस्पताल में नैदानिक गतिविधियों में शामिल हो सकते हैं और विशेष क्लीनिकों/इकाइयों के माध्यम से छात्रों को नैदानिक प्रशिक्षण प्रदान कर सकते हैं। इस तरह के विशिष्ट क्लीनिक उपर्युक्त विभागों में से किसी एक के तहत कार्य करेंगे जैसे कायचिकित्सा, पंचकर्म, शल्यतंत्र, शालाक्यतंत्र, स्त्री एवं प्रसूति तंत्र, कौमारभृत्य, अगदतंत्र (विषचिकित्सा) और स्वस्थवृत और योग। उपरोक्त अन्य विभागों से संबंधित शिक्षक स्नातकोत्तर शोध प्रबंध, पीएचडी, विशेष प्रशिक्षण जैसे अपने अनुभवों के आधार पर विशेष क्लीनिक स्थापित कर सकते हैं। रचना, क्रिया, मूल सिद्धांत, द्रव्यगुण, रसशास्त्र और रोगनिदान नाम से कोई ओपीडी नहीं होगी।

10. भारतीय चिकित्सा पद्धति (एसएमएएसटीडी –आईएसएम) में आधुनिक प्रगति, वैज्ञानिक और तकनीकी विकास के पूरण के लिए क्रियाविधि.–

(1) भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग अधिनियम, 2020 के लिए राष्ट्रीय आयोग की धारा 2 की उपधारा (एच) के तहत भारतीय चिकित्सा पद्धति (एसएमएएसटीडी–आईएसएम) में आधुनिक प्रगति, वैज्ञानिक और तकनीकी विकास के पूरक के संबंध में आवश्यकता को पूरा करने के लिए, विनियमन 9 के उप–विनियमन (1) के खंड (एफ) में उल्लेखित सभी चौदह विभागों को चौदह कार्यक्षेत्र के रूप में माना जाएगा, इसके अलावा दो और कार्यक्षेत्र होंगे, शिक्षा के लिए एक और अनुसंधान के लिए एक और प्रत्येक कार्यक्षेत्र को नैदानिक उपकरणों, वैचारिक प्रगति और उभरते क्षेत्रों के प्रासंगिक और उचित प्रगति और विकास के साथ पूरण, समृद्ध और अद्यतन किया जाएगा–

(i) जीव विज्ञान, रसायन विज्ञान, भौतिकी, गणित, सूक्ष्म जीव विज्ञान, जैव सूचना विज्ञान, अणुजैविक विज्ञान आदि जैसे बुनियादी विज्ञानों में नवाचार या प्रगति या नए विकास;

(ii) नैदानिक प्रगति;

(iii) चिकित्सीय प्रौद्योगिकी;

(iv) शल्य चिकित्सा तकनीक या प्रौद्योगिकी;

(v) औषधियों की गुणवत्ता और मानकीकरण, औषध विकास आदि सहित औषध प्रौद्योगिकी;

(vi) शिक्षण, प्रशिक्षण विधियां और प्रौद्योगिकी;

(vii) अनुसंधान विधियां, पैरामीटर, उपकरण और प्रमापी आदि;

(viii) प्रौद्योगिकीय प्रगति, स्वचालन, सॉफ्टवेयर, कृत्रिम बुद्धिमत्ता, डिजिटलीकरण, प्रलेखन आदि;

(ix) जैवचिकित्सा उन्नति;

(x) चिकित्सा उपकरण;

(xi) आयुर्वेद में अनुसंधान के किसी भी अन्य नवाचार, प्रगति, प्रौद्योगिकियों और विकास जो समझने, मान्य करने, शिक्षण, जांच, निदान, उपचार, पूर्वानुमान, प्रलेखन, मानकीकरण और चालन के लिए उपयोगी हैं।

(2) भारतीय चिकित्सा पद्धति में आधुनिक प्रगति, वैज्ञानिक और तकनीकी विकासों के पूरक के प्रयोजनार्थ भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा गठित बहु–विषयक कोर समिति होगी, जो उन अग्रिमों और विकासों की पहचान करती है जो किसी एक या एकाधिक कार्यक्षेत्रों में शामिल करने के लिए उपयोगी और उपयुक्त हैं।

(3) आयुर्वेद बोर्ड द्वारा गठित प्रत्येक कार्यक्षेत्र के लिए एक विशेषज्ञ समिति होगी, जो उक्त अग्रिमों और विकासों के अनुकूलन और निगमन की विधि को परिभाषित और सुझाव देगी और स्नातक या स्नातकोत्तर स्तर पर भी इसे शामिल करने के लिए निर्दिष्ट करेगी और विशेषज्ञ समिति उपयोग, मानक संचालन प्रक्रिया और आवश्यकतानुसार व्याख्या के लिए विस्तृत पद्धति विकसित करेगी।

(4) कोई भी शिक्षण कर्मचारी, व्यवसायी, शोधकर्ता, छात्र और नवोन्मेषक आदि भारतीय चिकित्सा पद्धति में आधुनिक प्रगति, वैज्ञानिक और प्रौद्योगिकीय विकासों के पूरक के संबंध में भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा विनिर्दिष्ट एक पोर्टल के माध्यम से अपने सुझाव भेज सकते हैं और ऐसे सुझावों को विचारार्थ कोर समिति के समक्ष रखा जाएगा।

(5) अध्ययनों द्वारा समर्थित आयुर्वेद के सिद्धांतों के आधार पर उक्त अग्रिमों की उचित व्याख्या के साथ आधुनिक प्रगति को शामिल किया जाएगा और पाठ्यक्रम में ऐसी प्रगति को शामिल करने के 5 वर्षों के बाद उन्हें आयुर्वेद का हिस्सा माना जाएगा, जो की आयुर्वेदीय परिभाषा में वर्णित होगा ।

(6) एक बार जब कोर समिति विशेषज्ञ समिति की सिफारिशों को अनुमोदित कर देती है, तो भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग, आयुर्वेद बोर्ड को निर्देश देगा कि वह विशेषज्ञ समिति द्वारा विनिर्दिष्ट स्नातक या स्नातकोत्तर के पाठ्यक्रम में इसे शामिल करे और आयोग दिशा–निर्देश जारी करेगा या यदि आवश्यक हो तो अनुशंसित आधुनिक प्रगति या वैज्ञानिक और तकनीकी विकास को शामिल करने के लिए शिक्षकों का अभिविन्यास करेगा।

(7) आधुनिक प्रगति के साथ शिक्षण सामग्री का अनुपात 40 से अधिक नहीं होगा।

(8) एसएमएएसटीडी– आईएसएम के लिए समितियों की संरचना–एक कोर समिति और प्रत्येक कार्यक्षेत्र के लिए एक विशेषज्ञ समिति होगी और ऐसी समितियों की संरचना निम्नानुसार होगी–

(ए) एसएमएएसटीडी–आईएसएम कोर कमेटी (आयुर्वेद) की संरचना

एसएमएएसटीडी– आईएसएम 11 सदस्यीय समिति में निम्नलिखित शामिल होंगे, –

(i) अध्यक्ष, आयुर्वेद बोर्ड– अध्यक्ष;

(ii) आयुर्वेद के दो विशेषज्ञ (जिसमें से एक संहिता और सिद्धांत के विशेषज्ञ) – सदस्य ;

(iii) सीएसआईआर, सीसीआरएएस, आईसीएमआर, डीबीटी, टेक्नोक्रेट, बायोमेडिकल इंजीनियरिंग– सदस्य से प्रत्येक में एक विशेषज्ञ (या तो सेवानिवृत्त या सेवा में) है;

(iv) एक शैक्षिक प्रौद्योगिकीविद्– सदस्य;

(v) आयुर्वेद बोर्ड के सदस्य – सदस्य सचिव।

बशर्ते कि कोर समिति अध्यक्ष, भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग की उचित अनुमति से विशिष्ट आवश्यकताओं के अनुसार किसी भी विशेषज्ञ का सह–चयन कर सकती है।

विचारार्थ विषय– (i) समिति का कार्यकाल उसके गठन की तारीख से तीन वर्ष का होगा।

(ii) समिति एक वर्ष में कम से कम दो बार बैठक करेगी।

(iii) समिति ऊपर सूचीबद्ध किसी भी आधुनिक प्रगति, वैज्ञानिक और तकनीकी विकास की पहचान करेगी जो आयुर्वेद के लिए प्रासंगिक और लागू हैं, या तो–

(ए) आयुर्वेद में अनुसंधान गतिविधियों को समझना, सत्यापित करना, या संचालन के लिए ;

(बी) एक विशिष्ट नैदानिक स्थिति और उपचार के निदान या पूर्व सूचना के लिए उपयोगी;

(सी) शिक्षण और प्रशिक्षण के लिए उपयोगी;

(डी) आयुर्वेद के माध्यम से स्वास्थ्य देखभाल सेवाओं के लिए उपयोगी।

(iv) समिति संहिता और सिद्धांत के दो आयुर्वेद विशेषज्ञों की सहायता से आयुर्वेद के बुनियादी सिद्धांतों के लिए अभिज्ञात आधुनिक प्रगति या वैज्ञानिक और तकनीकी विकास की प्रयोज्यता आयुर्वेद की समिति सुनिश्चित करेगी।

(v) आधुनिक अग्रिम या विकास की पहचान करने के लिए कार्यप्रणाली विकसित करने के लिए विशेषज्ञ समिति के लिए उपयुक्त विशेषज्ञों की पहचान करना और उनकी सिफारिश करना।

(vi) विशिष्ट ऊर्ध्वाध में इसके उपयोग के संदर्भ में अग्रिमों या विकासों के आवेदन का सुझाव देना या अंडर–ग्रेजुएट या स्नातकोत्तर पाठ्यक्रम आदि में शामिल करना, जैसा भी मामला हो।

(vii) चूंकि आधुनिक विज्ञान और प्रौद्योगिकी में बदलाव होते रहते है, कोर समिति आधुनिक विज्ञान और प्रौद्योगिकी के पुराने हिस्से की पहचान करेगी और इसे उचित आधुनिक प्रगति के साथ बदलने के लिए भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग को सुझाव देगी।

(बी) विशेषज्ञ समिति (आयुर्वेद) की संरचना .–

आयुर्वेद बोर्ड द्वारा 5 सदस्यों की विशेषज्ञ समिति का गठन निम्नानुसार किया जाएगा–

(i) आयुर्वेद बोर्ड द्वारा यथा निर्धारित विषय विशेषज्ञ – अध्यक्ष;

(ii) प्रासंगिक आयुर्वेद विषयों के दो विशेषज्ञ – सदस्य ;

(iii) प्रासंगिक आधुनिक विषय से एक विशेषज्ञ – सदस्य ;

(iv) शिक्षण प्रौद्योगिकी का एक विशेषज्ञ – सदस्य।

बशर्ते कि विशेषज्ञ समिति अध्यक्ष, आयुर्वेद बोर्ड की अनुमति से चयनित क्षेत्र के अनुसार संबंधित विशेषज्ञ का सह–चयन कर सकती है।

विचारार्थ विषय–(i) समिति का कार्यकाल उसके गठन की तारीख से 3 वर्ष का होगा।

(ii) समिति आयुर्वेद के अध्यक्ष बोर्ड (बीओए) के निर्देशानुसार कई बार बैठक करेगी।

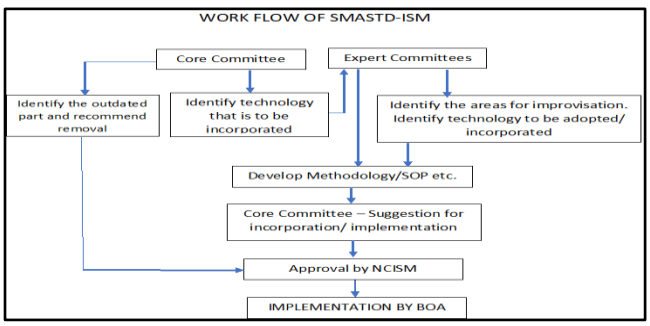
(iii) समिति कोर समिति के सुझाव पर काम करेगी और यह तय करेगी कि इसे पाठ्यक्रम में कैसे शामिल किया जाए, इसके शिक्षण के तरीके (यानी, व्याख्यान/गैर–व्याख्यान) और शैक्षिक प्रौद्योगिकीविद् की मदद से मूल्यांकन।

(iv) समिति पहले आयुर्वेद के मूल सिद्धांतों को शामिल करने के लिए पहचाने गए आधुनिक अग्रिमों के एप्लिकेशन और इसकी प्रासंगिकता को समझेगी।

(v) समिति आयुर्वेद में विशेष रूप से उस ऊर्ध्वाध के लिए उन्नत प्रौद्योगिकी की आवश्यकता की पहचान करेगी और उपयुक्त प्रौद्योगिकी की पहचान करेगी और मानक संचालन प्रक्रिया या पद्धति के साथ इसके उपयोग की सिफारिश करेगी।

(vi) समिति स्नातक या स्नातकोत्तर स्तर पर शामिल की जाने वाली आधुनिक प्रगति और प्रौद्योगिकी के संबंध में कोर समिति का सुझाव देगी।

(vii) एसएमएएसटीडी–आईएसएम का कार्य प्रवाह निम्नानुसार होगा –



11. परीक्षा– (ए) (i) प्रथम व्यावसायिक परीक्षा सामान्यतः प्रथम व्यावसायिक सत्र केअंत में होगी तथा पूर्ण की जाएगी।

(ii) वे छात्र जो, प्रथम व्यावसायिक के एक या दो विषय में अनुत्तीर्ण हों जाते हैं, उन्हें द्वितीय व्यावसायिक सत्र की शर्तें रखते हुए तथा द्वितीय व्यावसायिक सत्र में उपस्थित होने की अनुमति दी जाएगी।

(iii) दो से अधिक विषयों में अनुत्तीर्ण होने वाले छात्र को द्वितीय व्यवसायिक सत्र में कार्यकाल रखने की अनुमति नहीं दी जाएगी और प्रथम व्यवसायिक की बाद की पूरक परीक्षा प्रत्येक छह महीने में आयोजित की जाएगी।

(बी) (i) दूसरी व्यवसायिक परीक्षा आमतौर पर आयोजित की जाएगी और दूसरे व्यवसायिक सत्र के अंत तक पूरी की जाएगी,

(ii) द्वितीय व्यवसायिक के एक या दो विषयों में असफल होने वाले छात्र को तीसरे (अंतिम) व्यवसायिक सत्र की अवधि रखने की अनुमति दी जाएगी,

(iii) दो से अधिक विषयों में अनुत्तीर्ण होने वाले छात्र को तीसरे (अंतिम) व्यवसायिक सत्र में कार्यकाल रखने की अनुमति नहीं दी जाएगी और द्वितीय व्यवसायिक की बाद की पूरक परीक्षाएं हर छह महीने में आयोजित की जाएंगी।

(सी) (i) तीसरी (अंतिम) व्यवसायिक परीक्षा आमतौर पर आयोजित की जाएगी और तीसरे (अंतिम) व्यवसायिक सत्र के अंत तक पूरी की जाएगी।

(ii) तीसरी (अंतिम) व्यावसायिक परीक्षा के लिए उपस्थित होने से पहले छात्रों को पहले और दूसरे व्यवसायिक के सभी विषयों को उत्तीर्ण करना होगा एवं 9 ऐच्छिक अर्हताओं में उत्तीर्ण होना होगा।

(iii) तीसरे (अंतिम) व्यवसायिक परीक्षा के बाद की अनुपूरक परीक्षा प्रत्येक 6 महीने में आयोजित की जाएगी।

(डी) विषम बैच के छात्र (वे छात्र जो टर्म नहीं रख सके) के लिए कोई अलग कक्षा नहीं होगी और छात्र को नियमित बैच या जूनियर बैच के साथ कक्षा में शामिल होना होगा।

(ई) अनिवार्य परिभ्रामी विशिखानुप्रवेश में शामिल होने के लिए पात्र बनने के लिए, सभी तीन व्यवसायिक परीक्षाएं प्रवेश की तारीख से अधिकतम 10 वर्षों की अवधि के भीतर 9 ऐच्छिक में उत्तीर्ण करनी होंगी।

(एफ) थिअरी परीक्षा में बहुविकल्पीय प्रश्नों (एमसीक्यू) के लिए 10 प्रतिशत अंक, लघु प्रश्नों (एसएक्यू) के लिए 40 प्रतिशत अंक और दीर्घ प्रश्नों (एलएक्यू) के लिए 40 प्रतिशत अंक होंगे और ये प्रश्न विषय के पूरे पाठ्यक्रम को कवर करेंगे।

(जी) परीक्षा उत्तीर्ण करने के लिए अपेक्षित न्यूनतम अंक प्रत्येक विषय में थिअरी के लिए 50 प्रतिशत और व्यवहारिक घटक (जिसमें व्यावहारिक, नैदानिक, साक्षात्कार, आंतरिक मूल्यांकन और ऐच्छिक जहां भी लागू हो) में 50 प्रतिशत होंगे.

(एच) ऐच्छिक विषयों का मूल्यांकन–ऐच्छिक विषयों का मूल्यांकन कोर्स एवं परीक्षा मे उपस्थिति और मूल्यांकन से किया जाएगा और मूल्यांकन के आधार पर, छात्रों को क्रेडिट के साथ–साथ ग्रेड भी प्रदान किए जाएंगे–

(i) मॉड्यूलर कार्यक्रम के कम से कम 5 घंटे में भाग लेने के लिए एक क्रेडिट प्रदान किया जाएगा और एक छात्र प्रत्येक ऐच्छिक के लिए अधिकतम 5 क्रेडिट अर्जित कर सकेगा।

(ii) मूल्यांकन प्रत्येक माड्यूल के अंत में किया जाएगा और ग्रेडिंग के लिए 5 मॉड्यूलर मूल्यांकनों के औसत पर विचार किया जाएगा अर्थात् 25 प्रतिशत तक कांस्य , 26–50 प्रतिशत तक रजत, 51–75 प्रतिशत तक स्वर्ण तथा 76 प्रतिशत और इसके ऊपर प्लैटिनम।

(iii) ऐच्छिक विषयों की संरचना निम्नलिखित तालिका के अनुसार होगी, अर्थात् –

तालिका– 6

(ऐच्छिक की संरचना)

प्रत्येक ऐच्छिक नौ घंटे के पांच मॉड्यूल प्रत्येक (5* 9= 45)					
क्रम संख्या	घटक	अवधि (घंटे)		क्रेडिट्स	ग्रेड
		मॉड्यूल	ऐच्छिक		
1	शिक्षण	5	25	प्रत्येक मॉड्यूलर कार्यक्रम के कम से कम पांच घंटे में भाग लेने के लिए एक क्रेडिट। अधिकतम पांच क्रेडिट	ग्रेड सभी पांच मॉड्यूलर मूल्यांकन के औसत के आधार पर सम्मानित किया जाता है। कांस्यः <25 प्रतिशत। रजतः 26–50 प्रतिशत। स्वर्णः 51–75 प्रतिशत। प्लैटिनमः 76 प्रतिशत और उससे अधिक।
2	मार्गदर्शित शिक्षा	2	10		
3	विशेषज्ञ मार्गदर्शन/ प्रतिक्रिया	1	5		
4	मूल्यांकन	1	5		

(iv) (ए) छात्र को प्रत्येक व्यावसायिक सत्र के लिए न्यूनतम 3 ऐच्छिक विषयों में अर्हता प्राप्त करनी (कोई भी ग्रेड प्राप्त करना) होगी ।

(बी) ऐच्छिक विषयों की सूची प्रत्येक व्यावसायिक सत्र के लिए तीन सेटों (ए, बी और सी) के तहत उपलब्ध कराई जाएगी । अर्थात, पहले व्यावसायिक बी.ए.एम.एस के लिए एफए, एफबी और एफसी सेट, दूसरे व्यवसायिक बी.ए. एम.एस के लिए एसए, एसबी और एससी सेट, तीसरे व्यवसायिक बी.ए.एम.एस. के लिए टीए, टीबी और टीसी सेट ।

(सी) छात्र संबंधित व्यावसायिक बी.ए.एम.एस के लिए विनिर्दिष्ट प्रत्येक सेट से अपनी पसंद के अनुसार किसी एक ऐच्छिक विषय का चयन कर सकता है।

(डी) प्रत्येक क्रेडिट के लिए दो अंकों का वेटेज और प्रत्येक ऐच्छिक के लिए अधिकतम 10 अंक प्रदान किए जाएंगे।

(ई) इन ऐच्छिक अंकों को इन विनियमों में विनिर्दिष्ट संबंधित विषयों के साक्षात्कार व्यवसायिक अंकों में जोड़ा जाएगा।

(एफ) प्रत्येक सत्र के लिए तीन अनिवार्य ऐच्छिकों के अलावा, छात्रों को अपनी रुचि के अनुसार अतिरिक्त ऐच्छिकों की संख्या को चुनने और अर्हता प्राप्त करने की स्वतंत्रता है।

(जी) अंक वेटेज केवल प्रति व्यावसायिक सत्र में तीन ऐच्छिक के लिए होगा अर्थात संबंधित व्यावसायिक सत्र के प्रत्येक सेट से एक ऐच्छिक विषय।

(एच) अर्जित क्रेडिट और प्राप्त ग्रेड का उल्लेख करने वाले प्रत्येक ऐच्छिक विषय के लिए एक अलग ऑनलाइन प्रमाण पत्र प्राप्त होगा।

(v) संस्था की परीक्षा शाखा उपर्युक्त विनिर्दिष्ट छात्रों द्वारा प्राप्त किए गए ऐच्छिकों के अंकों को संकलित करेगी और संस्था के प्रमुख के माध्यम से विश्वविद्यालय को प्रस्तुत करेगी ताकि विश्वविद्यालय **तालिका 11, 13 और 15** में दर्शाए गए अनुसार संबंधित विषयों के साक्षात्कार में इसे जोड़ सके।

(आई) (i) 65 प्रतिशत और उससे अधिक अंक प्राप्त करने वाले उम्मीदवार को इस विषय में प्रथम श्रेणी प्रदान की जाएगी और 75 प्रतिशत और उससे अधिक अंक प्राप्त करने वाले उम्मीदवार को इस विषय में डिस्टिंशन प्रदान किया जाएगा।

(ii) क्लास और डिस्टिंशन पूरक परीक्षाओं के लिए लागू नहीं होगा।

(जे) (i) प्रत्येक छात्र को परीक्षा में उपस्थित होने के लिए थिअरी (यानी, व्याख्यान घंटे) व्यावहारिक और नैदानिक (यानी, गैर–व्याख्यान घंटे) में प्रत्येक विषय में कम से कम 75 प्रतिशत उपस्थिति बनाए रखने की आवश्यकता होगी।

(ii) जहां संस्थान भौतिक उपस्थिति रजिस्टर रखता है, उसे अनुलग्नक–iv के अनुसार संचयी नंबरिंग विधि में दर्ज किया जाएगा और पाठ्यक्रम/अवधि/पाठ्यक्रम के भाग के अंत में, प्रत्येक छात्र के हस्ताक्षर प्राप्त करने के बाद, इसे संबंधित विभागाध्यक्ष द्वारा प्रमाणित किया जाएगा और संस्थान के प्रमुख द्वारा अनुमोदित किया जाना है।

(iii) अनुमोदित उपस्थिति विश्वविद्यालय को अग्रेषित की जाएगी।

(के) यदि कोई छात्र संज्ञानात्मक कारणों से नियमित परीक्षा में उपस्थित होने में विफल रहता है, तो वह नियमित छात्र के रूप में पूरक परीक्षा में उपस्थित हो सकता है और नियमित परीक्षा में उसकी अनुपस्थिति को एक प्रयास के रूप में नहीं माना जाएगा।

(एल) इन विनियमों के बावजूद –

(i) खंड 11 (ई) उस छात्र पर लागू होगा जिसने भारतीय चिकित्सा केंद्रीय परिषद (भारतीय चिकित्सा में शिक्षा के न्यूनतम मानक) विनियम, 1986 के तहत दाखिला लिया था, ऐच्छिक को छोड़कर और अनुसूची–1 की धारा 3 के अनुसार (अधिसूचना संख्या 24–14/2016 (यूजी. विनियमन) विनियम, 2016 द्वारा यथासंशोधित) 4 व्यावसायिकों के साथ।

(ii) भारतीय चिकित्सा केंद्रीय परिषद (भारतीय चिकित्सा में शिक्षा के न्यूनतम मानक) विनियम, 1986 के तहत भर्ती होने वाले छात्र, अनुसूचीआई के खंड 6 (1) (सी), 2 (सी), 3 (सी), 4 (डी), और 4 (ई) के तहत निर्धारित संबंधित व्यावसायिक परीक्षा पास करने के लिए अधिकतम अवसर और वर्षों की अधिकतम अवधि (अधिसूचना संख्या 24–14/2016 (यू.जी. विनियमन) विनियम, 2016) उस पर लागू नहीं होगा।

12 मूल्यांकन–छात्रों का मूल्यांकन निम्नानुसार प्रारंभिक और योगात्मक मूल्यांकन के रूप में होगा–

(ए) **प्रारंभिक मूल्यांकन**– छात्रों का मूल्यांकन कक्षा में उनके प्रदर्शन का आकलन करने, कार्यक्रम सामग्री की समझ और उनके सीखने के परिणाम को निम्नलिखित तरीके से निर्धारित करने के लिए आवधिक रूप से किया जाएगा, अर्थात् –

(i) आवधिक मूल्यांकन किसी विषय या मॉड्यूल या पाठ्यक्रम के किसी विशेष भाग के शिक्षण के अंत में किया जाएगा और निम्नलिखित तालिका के अनुसार मूल्यांकन विधियों को सामग्री के लिए उपयुक्त के रूप में अपनाया जा सकता है, अर्थात् –

तालिका–7

(आवधिक मूल्यांकन के लिए मूल्यांकन विधियाँ)

क्रम संख्या	मूल्यांकन विधि
1.	व्यावहारिक / नैदानिक प्रदर्शन
2.	साक्षात्कार,एमसीक्यू, एमईक्यू (संशोधित निबंध प्रश्न / संरचित प्रश्न)
3.	ओपन बुक टेस्ट (समस्या आधारित)
4.	सारांश लेखन (शोध पत्र / संहिता)
5.	कक्षा प्रस्तुतिकरण कार्य पुस्तिका रखरखाव
6.	समस्या आधारित असाइनमेंट
7.	उद्देश्य संरचित नैदानिक परीक्षा (ओसीएसई), उद्देश्य संरचित व्यावहारिक परीक्षा (ओपीएसई), लघू नैदानिक मूल्यांकन अभ्यास (मिनी–सीईएक्स), प्रक्रियाओं का प्रत्यक्ष अवलोकन (डीओपी), केस आधारित चर्चा (सीबीडी)
8.	पाठ्येतर गतिविधियां, (सामाजिक कार्य, सार्वजनिक जागरूकता, निगरानी गतिविधियां, खेल या अन्य गतिविधियां जो विभाग द्वारा तय की जा सकती हैं)।
9.	छोटा प्रोजेक्ट

(ii) (ए) कॉलेज और संस्थान द्वारा पाठ्यक्रम के 30 प्रतिशत के लिए 6 महीने (प्रथम अवधि परीक्षा) के अंत में और पाठ्यक्रम के 40 प्रतिशत नए भाग के लिए 12 महीने (द्वितीय अवधि परीक्षा) पर आंतरिक मूल्यांकन किया जाएगा।

(बी) शेष 30 प्रतिशत पाठ्यक्रम विश्वविद्यालय परीक्षा से पहले पिछले 6 महीनों (तीसरे कार्यकाल) में पूरा किया जाएगा;

(iii) प्रथम अवधि परीक्षा से पहले प्रत्येक विषय के लिए न्यूनतम 6 आवधिक मूल्यांकन होंगे (आमतौर पर संबंधित व्यावसायिक के बी.ए.एम.एस के छठे महीने में) द्वितीय अवधि परीक्षा से पहले न्यूनतम 3 आवधिक मूल्यांकन (आमतौर पर संबंधित व्यवसायिक बी.ए.एम.एस के 12 वें महीने में) और संबंधित व्यावसायिक बी.ए.एम.एस की अंतिम विश्वविद्यालय परीक्षाओं (योगात्मक मूल्यांकन) से पहले न्यूनतम 3 आवधिक मूल्यांकन।

(iv) योजना और मूल्यांकन की गणना निम्नलिखित तालिकाओं के अनुसार होगी, अर्थात् : –

तालिका–8

मूल्यांकन की योजना (प्रारंभिक और योगात्मक),

क्रम संख्या	व्यावसायिक पाठ्यक्रम	व्यावसायिक पाठ्यक्रम की अवधि		
		पहला कार्यकाल (1–6 महीने)	दूसरा कार्यकाल (7–12 महीने)	तीसरा कार्यकाल (13–18 महीने)
1	पहला व्यावसायिक बी.ए.एम.एस	3 पीए और पहला टीटी	3 पीए और दूसरा टीटी	3 पीए और यू ई
2	दूसरा व्यावसायिक बी.ए.एम.एस	3 पीए और पहला टीटी	3 पीए और दूसरा टीटी	3 पीए और यू ई
3	तीसरा व्यावसायिक बी.ए.एम.एस	3 पीए और पहला टीटी	3 पीए और दूसरा टीटी	3 पीए और यू ई
पीएः आवधिक मूल्यांकन टीटीः टर्म टेस्ट; यूई : विश्वविद्यालय परीक्षाएं				

तालिका– 9

(30 अंकों वाले विषय के लिए आंतरिक मूल्यांकन के लिए उदाहरण)

अवधि	आवधिक मूल्यांकन					टर्म टेस्ट	अवधि मूल्यांकन	
	ए	बी	सी	डी	ई	एफ	जी	एच
	1 (15)	2 (15)	3 (15)	औसत (एबीसी / 3)	30में कनवर्ट किया गया	टर्म टेस्ट (30)	उप कुल	अवधि मूल्यांकन

					(डी/45*30)			
पहला							ई+एफ	ई+एफ /2
दूसरा							ई+एफ	ई+एफ /2
तीसरा						शून्य	ई	ई
अंतिम आईए	'एच' स्तंभ में दर्शाए गए अनुसार तीन अवधि मूल्यांकन चिह्नों का औसत							
कोष्ठक में अधिकतम अंक								

(बी) **योगात्मक मूल्यांकन**–(i) प्रत्येक व्यावसायिकों बी.ए.एम.एस के अंत में आयोजित अंतिम विश्वविद्यालय परीक्षाएं योगात्मक मूल्यांकन होंगी।

(ii) दोहरी मूल्यांकन प्रणाली होगी और पुनर्मूल्यांकन के लिए कोई प्रावधान नहीं होगा।

(iii) विश्वविद्यालय की प्रैक्टिकल/क्लीनिकल/ मौखिक परीक्षा के लिए दो परीक्षक (एक इंटरनल और एक एक्सटर्नल) होंगे।

(iv) योगात्मक मूल्यांकन के परिणामों की घोषणा करते समय, आंतरिक मूल्यांकन घटक और ऐच्छिक अंकों को **तालिका 11, 13 और 15** में दिए गए अंक पैटर्न के वितरण के अनुसार माना जाएगा।

13 व्यावसायिक विषय, पत्रों की संख्या, शिक्षण घंटे और अंक वितरण निम्नलिखित तालिकाओं के अनुसार होंगे, अर्थातः –

तालिका–10

(प्रथम व्यावसायिक बी.ए.एम.एस विषयों के लिए शिक्षण घंटे)

पहला व्यावसायिक बी.ए.एम.एस कार्य दिवस = 320, शिक्षण घंटे = 1920 इंडक्शन कार्यक्रम = 15 कार्य दिवस (90 घंटे) शेष दिन/घंटे = 320–15 = 305 दिन/1830 घंटे			
विषय कोड	**शिक्षण घंटों की संख्या**		
	व्याख्यान	गैर–व्याख्यान	कुल
एवाईयूजी–एसएन और एआई	100	200	300
एवाईयूजी –पीवी	90	140	230
एवाईयूजी–केएस	150	250	400
एवाईयूजी–आरएस	180	320	500
एवाईयूजी–एसए1	140	260	400
कुल	**660**	**1170**	**1830**

तालिका–11

(प्रथम व्यावसायिक बी.ए.एम.एस विषयों के लिए पत्रों और अंक वितरण की संख्या)

क्रम संख्या	विषय कोड	पत्र	सिद्धांत	व्यावहारिक या नैदानिक मूल्यांकन					कूल योग
				व्यावहारिक/नैदानिक	साक्षात्कार	ऐच्छिक	आईए	उप कुल	
1.	एवाईयूजी–एसएन और एआई	2	200	-	75*	10(सेट–एफए)	15	100	300
2.	एवाईयूजी–पीवी	2	200	100	60	10(सेट–एफबी)	30	200	400
3.	एवाईयूजी–केएस	2	200	100	70	-	30	200	400
4.	एवाईयूजी–आरएस	2	200	100	70	-	30	200	400
5.	एवाईयूजी–एसए1	1	100	-	75	10 (सेट–एफसी)	15	100	200
कुल योग									**1700**

*** साक्षात्कार की परीक्षा संस्कृत के लिए होगी, आयुर्वेद इतिहास के लिए नहीं (सेट–एफए, एफबी, एफसी – पहला व्यावसायिक बी.ए.एम.एस. के लिए ऐच्छिक के सेट।)**

तालिका–12

(दूसरे व्यावसायिक बी.ए.एम. एस विषयों के लिए शिक्षण घंटे)

क्रम संख्या	विषय कोड	शिक्षण घंटों की संख्या		
		व्याख्यान	गैर–व्याख्यान	कुल
1	एवाईयूजी–डीजी	150	250	400
2	एवाईयूजी–आरबी	150	300	450
3	एवाईयूजी–आरएन	150	300	450
4	एवाईयूजी–ए टी	100	200	300
5	एवाईयूजी–एसए2	100	140	240
6	एवाईयूजी – एस डब्लू	150	250	400
कुल		**800**	**1440**	**2240**

तालिका–13

(द्वितीय व्यावसायिक बी.ए.एम. एस विषयों के लिए पेपर और अंक वितरण की संख्या)

क्रम संख्या	विषय कोड	पेपर	सिद्धांत	व्यावहारिक या नैदानिक मूल्यांकन					
				व्यावहारिक या नैदानिक	साक्षात्कार	ऐच्छिक	आई ए	उप कुल	कुल योग
1.	एवाईयूजी–डीजी	2	200	100	70	-	30	200	400
2.	एवाईयूजी–आर बी	2	200	100	70	-	30	200	400
3.	एवाईयूजी–आर एन	2	200	100	70	-	30	200	400
4.	एवाईयूजी–एटी	1	100	100	60	10 (सेट–एसए)	30	200	300
5.	एवाईयूजी –एसए2	1	100	.	75	10 (सेट–एसबी)	15	100	200
6.	एवाईयूजी–एस डब्लू	2	200	100	60	10 (सेट–एससी)	30	200	400
कुल									**2100**
(सेट–एसए, एसबी, एससी – दूसरे व्यावसायिक बी.ए.एम.एस के लिए ऐच्छिक के सेट)									

तालिका–14

(तीसरे व्यावसायिक बी.ए.एम. एस विषयों के लिए शिक्षण घंटे)

तीसरा व्यावसायिक बी.ए.एम.एस. कार्य दिवस = 320, शिक्षण घंटे = 2240				
क्रम संख्या	विषय कोड	शिक्षण घंटों की संख्या		
		व्याख्यान	गैर–व्याख्यान	कुल
1	एवाईयूजी–केसी	150	300	450
2	एवाईयूजी–पीके	100	200	300
3	एवाईयूजी–एसटी	125	250	375
4	एवाईयूजी–एसएल	100	200	300
5	एवाईयूजी–पीएस	100	175	275
6	एवाईयूजी–केबी	100	175	275
7	एवाईयूजी–एसए 3	50	100	150
8	एवाईयूजी–आरएम	25	50	75

9	एवाईयूजी–ईएम	..	40	40
कुल		750	1490	2240

तालिका–15

(तीसरे व्यावसायिक बी.ए.एम.एस विषयों के लिए पेपर और अंक वितरण की संख्या)

क्रम संख्या	विषय कोड	पेपर	सिद्धांत	व्यावहारिक या नैदानिक मूल्यांकन					कुल योग
				व्यावहारिक या नैदानिक	साक्षात्कार	ऐच्छिक	आईए	उप कूल	
1	एवाईयूजी–केसी	3	300	100	70	-	30	200	500
2	एवाईयूजी–पीके	1	100	100	70	-	30	200	300
3	एवाईयूजी–एसटी	2	200	100	70	-	30	200	400
4	एवाईयूजी–एसएल	2	200	100	70	-	30	200	400
5	एवाईयूजी–पीएस	2	200	100	60	10 (सेट–टीए)	30	200	400
6	एवाईयूजी–केबी	1	100	100	60	10 (सेट–टीबी)	30	200	300
7	एवाईयूजी–एसए3	1	100	-	75	10 (सेट–टीसी)	15	100	200
8	एवाईयूजी–आरएम	1	50	-	-	-	.	.	50
कुलयोग									2550
(सेट–टीए, टीबी, टीसी – तीसरे व्यवसायिक बी.ए.एम.एस के लिए ऐच्छिक के सेट)									

14 अध्ययन के दौरान छात्र का स्थानान्तरण :–

(1) छात्र को किसी अन्य महाविद्यालय से अपना अध्ययन जारी रखने हेतु प्रथम वर्ष की परीक्षा उत्तीर्ण करने के पश्चात् स्थानान्तरण लेने की अनुमति दी जाएगी। अनुत्तीर्ण छात्रों को स्थानान्तरण तथा मध्यावधि स्थानान्तरण की अनुमति नहीं दी जाएगी।

(2) स्थानान्तरण के लिए, छात्रों को कॉलेजों और विश्वविद्यालयों दोनों की पारस्परिक सहमति प्राप्त करनी होगी और यह रिक्त सीट की सुनिश्चिति के पश्चात् होगा।

15 अनिवार्य परिभ्रामी विशिखानुप्रवेश– (ए) (i) अनिवार्य परिभ्रामी विशिखानुप्रवेश की अवधि एक वर्ष होगी और आमतौर पर नियमित बैच के छात्रों के लिए अप्रैल के पहले कार्य दिवस और पूरक बैच के छात्रों के लिए अक्टूबर के पहले कार्य दिवस पर शुरू होगी।

(ii) छात्र 9 ऐच्छिक सहित पहले से तीसरे (अंतिम) व्यावसायिक परीक्षा से सभी विषयों को उत्तीर्ण करने के बाद और संबंधित विश्वविद्यालयों से अनंतिम उपाधि प्रमाण पत्र और संबंधित राज्य बोर्ड या अनिवार्य परिभ्रामी विशिखानुप्रवेश के लिए परिषद से अनंतिम पंजीकरण प्रमाण पत्र प्राप्त करने के बाद अनिवार्य परिभ्रामी विशिखानुप्रवेश कार्यक्रम में शामिल होने के लिए पात्र होगा।

(बी) प्रशिक्षणार्थी –वेतन**:** विशिखानुप्रवेश के दौरान, केंद्र सरकार, राज्य सरकार और संघ राज्य क्षेत्र संस्थान से संबंधित को, प्रशिक्षणार्थी –वेतन का भुगतान संबंधित सरकार के तहत अन्य चिकित्सा प्रणाली के बराबर किया जाएगा और चिकित्सा प्रणालीयों के बीच कोई विसंगति नहीं होगी।

(सी) विशिखानुप्रवेश के दौरान स्थानान्तरण –(i) विशिखानुप्रवेश के दौरान स्थानान्तरण कॉलेजों और विश्वविद्यालय दोनों की सहमति से होगा, उस मामले में जहां स्थानान्तरण दो अलग–अलग विश्वविद्यालयों के कॉलेजों के बीच है।

(ii) यदि स्थानान्तरण केवल एक ही विश्वविद्यालय के कॉलेजों के बीच है, तो दोनों कॉलेजों की सहमति आवश्यक होगी।

(iii) संस्थान या कॉलेज द्वारा जारी चरित्र प्रमाण पत्र के आधार पर विश्वविद्यालय द्वारा स्थानान्तरण स्वीकार किया जाएगा और कॉलेज और विश्वविद्यालय द्वारा अग्रेषित आवेदन को अनापत्ति प्रमाण पत्र के साथ, जैसा भी मामला हो सकता है।

(डी) अभिविन्यास कार्यक्रम –(i) प्रशिक्षणार्थी अनिवार्य रूप से विशिखानुप्रवेश के संबंध में एक अभिविन्यास कार्यक्रम में भाग लेंगे और विशिखानुप्रवेश शुरू होने से पहले अभिविन्यास का संचालन करना शिक्षण संस्थान की जिम्मेदारी होगी।

(ii) चिकित्सा पद्धति और व्यवसाय, चिकित्सा नैतिकता, विधि वैद्यक पहलुओं, चिकित्सा अभिलेखों, चिकित्सा बीमा, चिकित्सा प्रमाणन, संचार कौशल, आचरण और शिष्टाचार, राष्ट्रीय और राज्य स्वास्थ्य परिचर्या कार्यक्रम के नियमों और विनियमों के बारे में अपेक्षित ज्ञान प्राप्त करने के लिए प्रशिक्षणार्थी को बनाने के इरादे से अभिविन्यास आयोजित किया जाएगा।

(iii) अभिविन्यास कार्यशाला विशिखानुप्रवेश की शुरुआत में आयोजित की जाएगी और प्रत्येक प्रशिक्षणार्थी द्वारा एक ई–लॉगबुक का रखरखाव किया जाएगा, जिसमें प्रशिक्षणार्थी अभिविन्यास के दौरान उसके द्वारा की गई गतिविधियों का दिनांक–वार विवरण दर्ज करेगा।

(iv) अभिविन्यास की अवधि सात दिनों की होगी।

(v) भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा समय–समय पर यथा निर्धारित अभिविन्यास के संचालन के लिए नियमावली का पालन किया जाएगा।

(ई) विशिखानुप्रवेश के दौरान गतिविधियां– (i) प्रशिक्षणार्थी के दैनिक कार्य घंटे आठ घंटे से कम नहीं होगा प्रशिक्षणार्थी विशिखानुप्रवेश के दौरान प्रशिक्षणार्थी द्वारा की गई सभी गतिविधियों को शामिल करते हुए एक ई–लॉगबुक बनाए रखेगा।

(ii) सामान्यतया एक वर्ष की विशिखानुप्रवेश निम्नानुसार होगी–

(ए) विकल्प I– कॉलेज से जुड़े आयुर्वेद अस्पताल में 6 महीने और प्राथमिक स्वास्थ्य केंद्र या सामुदायिक स्वास्थ्य केंद्र या ग्रामीण अस्पताल या जिला अस्पताल या सिविल अस्पताल या आधुनिक चिकित्सा या आयुर्वेद चिकित्सा के किसी भी सरकारी अस्पताल या एनएबीएच (अस्पतालों के लिए राष्ट्रीय प्रत्यायन बोर्ड) मान्यता प्राप्त आयुर्वेद के निजी अस्पताल में 6 महीने के नैदानिक प्रशिक्षण में विभाजित। केवल एनएबीएच प्रत्यायन वाले ओपीडी आधारित क्लीनिक विशिखानुप्रवेश के लिए पात्र नहीं होंगे।

(बी) विकल्प II– कॉलेज से जुड़े आयुर्वेद अस्पताल में सभी 12 महीने।

(iii) कॉलेज से संबद्ध आयुर्वेद अस्पताल में या राष्ट्रीय भारतीय चिकित्सा पद्धति आयोग द्वारा निर्धारित गैर–शिक्षण अस्पतालों में, जैसा भी मामला हो, 6 या 12 महीनों का नैदानिक प्रशिक्षण निम्नलिखित तालिका के अनुसार आयोजित किया जाएगा, अर्थातः –

तालिका–16

(महाविद्यालय से सम्बद्ध आयुर्वेद शिक्षण चिकित्सालय में विशिखानुप्रवेश अवधि का विवरण)

क्रम संख्या	विभाग	विकल्प I	विकल्प II
1	मानस रोग, रसायन और वाजीकरण, स्वस्थवृत्त और योग, आत्ययिक चिकित्सा सहित कायचिकित्सा ओपीडी, संबंधित विशेषताओं और संबंधित आईपीडी	1.5 माह	3 माह
2	ओटी, संबंधित विशेषताओं और संबंधित आईपीडी सहित शल्य ओपीडी	1 माह	2 माह
3	शालाक्य ओपीडी, ओटी, क्रियाकल्प और संबंधित आईपीडी सहित संबंधित विशेषताएं	3 सप्ताह	1.5 माह
4	ओटी और संबंधित आईपीडी सहित स्त्री रोग एवं प्रसूति ओपीडी से संबंधित विशेषताएं	3 सप्ताह	1.5 माह
5	कौमारभृत्य ओपीडी से संबंधित विशेषताएं जिनमें एनआईसीयू, बाल चिकित्सा पंचकर्म और संबंधित आईपीडी शामिल हैं	0.5 सप्ताह	1 माह
6	पंचकर्म ओपीडी से संबंधित विशेषताएं, पंचकर्म चिकित्सा कक्ष और संबंधित आईपीडी	1 माह	2 माह
7	विषचिकित्सा ओपीडी किसी भी अन्य विशिष्टताओं, संबंधित आईपीडी, स्क्रीनिंग ओपीडी, पथ्या इकाई आदि (प्रशिक्षु की पसंद के अनुसार)	0.5 माह	1 माह
8	सामुदायिक स्वास्थ्य केंद्र या ग्रामीण अस्पताल या जिला अस्पताल या सिविल अस्पताल इत्यादि	6 माह	....

(iv) (ए) प्रशिक्षणार्थियों को निम्नलिखित में से किसी भी केन्द्र में कार्यरत किया जाएगा जहां राष्ट्रीय स्वास्थ्य कार्यक्रम कार्यान्वित किया जा रहा है और इन प्रविष्टि को उन्मुख होना होगा और राष्ट्रीय स्वास्थ्य कार्यक्रम के कार्यान्वयन के ज्ञान को इस संबंध में परिचित करना होगा, –

(ए) प्राथमिक स्वास्थ्य केन्द्र;

(बी) सामुदायिक स्वास्थ्य केंद्र या सिविल अस्पताल या जिला अस्पताल;

(सी) आधुनिक चिकित्सा के किसी भी मान्यता प्राप्त या अनुमोदित अस्पताल;

(डी) किसी भी मान्यता प्राप्त या अनुमोदित आयुर्वेदिक अस्पताल या औषधालय ;

(ई) केन्द्रीय आयुर्वेदिक विज्ञान अनुसंधान परिषद की नैदानिक इकाई में;

(बी) खंड (ए) से (ई) में उल्लेखित उपर्युक्त सभी संस्थानों को इस तरह के प्रशिक्षण लेने के लिए संबंधित विश्वविद्यालय या सरकार द्वारा नामित प्राधिकारी द्वारा मान्यता प्राप्त करनी होगी।

(v) प्रशिक्षणार्थी कॉलेज से संबद्ध अस्पताल में संबंधित विभाग में निम्नलिखित गतिविधियों को करेगा, अर्थात –

(ए) **कायचिकित्सा**.– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा कि वह निम्नलिखित विषयो में कुशल बनाने हेतु उसे सक्षम बनाए, अर्थात् –

(i) आयुर्वेदिक चिकित्सा द्वारा सामान्य बीमारियों के मामले में, जांच, निदान और प्रबंधन जैसे सभी नियमित कार्य

(ii) हीमोग्लोबिन आंकलन, पूर्ण हीमोग्राम, मूत्र विश्लेषण, रक्त परजीवियों की सूक्ष्म जांच, थूक परीक्षा, मल परीक्षा, आयुर्वेदिक विधि द्वारा मूत्र एवं मल परीक्षा, प्रयोगशाला आंकड़ों और नैदानिक निष्कर्षों की व्याख्या और निदान पर पहुंचने और विभिन्न रोग स्थितियों की गंभीरता की निगरानी के लिए उपयोगी सभी रोगविज्ञान संबंधी और क्ष–किरण जांच जैसे नियमित नैदानिक रोगविज्ञान संबंधी कार्य;

(iii) नियमित वार्ड प्रक्रियाओं में प्रशिक्षण और रोगियों के आहार, आदतों और चिकित्सा अनुसूची के सत्यापन के संबंध में पर्यवेक्षण।

(बी) पंचकर्म– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा कि वह निम्नलिखित विषयो में कुशल बनाने हेतु उसे सक्षम बनाए, अर्थात् –

(i) पूर्व कर्म, प्रधान कर्म और पश्च्यात कर्म के संबंध में पंचकर्म और उपकर्म प्रक्रियाएं और तकनीकें;

(ii) प्रक्रियागत जटिलताओं का प्रबंधन, प्रक्रियाओं के लिए रोगियों की काउंसलिंग, चिकित्सा कक्षों का अनुरक्षण आदि।

(सो.) शल्य तंत्र–– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा कि वह निम्नलिखित विषयो में कुशल बनाने हेतु उसे सक्षम बनाए, अर्थात्–

(i) आयुर्वेदिक सिद्धांतों के अनुसार नैदानिक परीक्षा, सामान्य शल्य चिकित्सा विकारों का निदान और प्रबंधन;

(ii) अस्थिभग्न संधिच्युति, तीव्र पेट दर्द जैसी कतिपय आपात शल्य चिकित्सा स्थितियों का प्रबंधन;

(iii) एसेप्टिक और एंटीसेप्टिक्स तकनीकों का व्यावहारिक प्रशिक्षण, स्टेरलाइजेशन;

(iv) पूर्व शल्य कर्म तथा पश्च्यात शल्य कर्म प्रबंधनों में शामिल होगा;

(v) स्थानीय संज्ञाहरण तकनीकों का व्यावहारिक उपयोग और संज्ञाहरण औषधियों का उपयोग;

(vi) रेडियोलॉजिकल प्रक्रियाएं, एक्स–रे की नैदानिक व्याख्या, इंट्रावीनस पायलोग्राम, बेरियम मील, सोनोग्राफी और इलेक्ट्रो कार्डियो ग्राम;

(vii) शल्य चिकित्सा प्रक्रियाएं और नियमित वार्ड तकनीकें जैसे–

(ए) ताजा चोटों का शमन;

(बी) घावों, जलन, अल्सर और इसी तरह की बीमारियों की ड्रेसिंग;

(सी) फोड़े का चीरा और जल निकासी;

(डी) सिस्ट का उच्छेदन;

(ई) वेनेसेक्शन;

(एफ) एनो–रेक्टल रोगों में क्षारसूत्र का प्रयोग; और

(जी) रक्तमोक्षन, अग्निकर्म, क्षारकर्म

(डी) शालक्य तंत्र– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा कि वह निम्नलिखित विषयो में कुशल बनाने हेतु उसे सक्षम बनाए, अर्थात्–

(i) आयुर्वेदिक सिद्धांतों के अनुसार सामान्य शल्य चिकित्सा विकारों का निदान और प्रबंधन;

(ii) पूर्व शल्य कर्म तथा पश्च्यात शल्य कर्म प्रबंधनों में शामिल होगा;

(iii) कान, नाक, गले, दंत संबंधी समस्याओं, नेत्र संबंधी समस्याओं में शल्य चिकित्सा प्रक्रियाएं;

(iv) बाह्य रोगी विभाग में सहायक उपकरणों के साथ आंख, कान, नाक, गला और अपवर्तक त्रुटि की जांच; और

(v) बाह्य रोगी और रोगी विभाग स्तर पर सभी क्रियाकल्प, नस्य, रक्तमोक्षण, कर्णपूरण, शिरोधारा, पुटपाक, कवल, गंडूष।

(ई) प्रसूति तंत्र एवं स्त्री रोग– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा ताकि वह निम्नलिखित विषयो में कुशल बनाने हेतु उसे सक्षम बनाए, अर्थात् –

(i) प्रसवपूर्व और प्रसवोत्तर समस्याएं और उनके उपचार, प्रसवपूर्व और प्रसवोत्तर देखभाल;

(ii) सामान्य और असामान्य प्रसवों के प्रबंधन की जानकारी;

(iii) योनि पूर्णा, योनि पिचू, उत्तरबस्ती आदि सहित लघु और प्रमुख प्रसूति शल्य चिकित्सा प्रक्रियाएं।

(iv) आयुर्वेदिक चिकित्सा द्वारा सामान्य स्त्री रोग के मामले लेने, जांच, निदान और प्रबंधन जैसे सभी नियमित कार्य;

(v) महिलाओं में सामान्य कर्करोगजन्य स्थितियों की जांच।

(एफ) कौमारभृत्यः प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा ताकि वह निम्नलिखित विषयो में कुशल बनाने हेतु उसे सक्षम बनाऐ, अर्थात्–

(i) स्वर्णप्राशन सहित प्रतिरक्षण कार्यक्रम के साथ–साथ नवजात शिशुओं की देखभाल

(ii) महत्वपूर्ण बाल चिकित्सा समस्याएं और उनका आयुर्वेदिक प्रबंधन;

(iii) बच्चों में पंचकर्म।

(जी) स्वस्थवृत्त और योग.– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा ताकि वह विषयो में कुशल बनाने हेतु उसे सक्षम बनाऐ, अर्थात्–

(i) पोषण संबंधी विकारों, प्रतिरक्षण, संक्रामक रोगों के प्रबंधन आदि सहित स्थानीय रूप से प्रचलित स्थानिक रोगों की रोकथाम और नियंत्रण का कार्यक्रम;

(ii) परिवार कल्याण योजना कार्यक्रम;

(iii) दिनचर्या, सदवृत्त (जीवन शैली और आहार परामर्श दैनिक मौसमी दिनचर्या) सहित आहार और विहार परिकल्पना; और

(iv) अष्टांग योग का अभ्यास।

(एच) आत्ययिकचिकित्सा (आपातकालीन या हताहत प्रबंधन)– प्रशिक्षणार्थी को व्यावहारिक रूप से प्रशिक्षित किया जाएगा ताकि वह सभी आपातकालीन स्थितियों से निपटने के लिए परिचित हो सके और उसे सक्षम बना सके और हताहत और आघात के मामलों की पहचान और उनके प्राथमिक उपचार में अस्पताल के हताहत वर्ग में सक्रिय रूप से भाग ले सके और ऐसे मामलों को पहचाने गए अस्पतालों में भेजने की प्रक्रिया भी हो।

(vi) प्रशिक्षणार्थी अपने नियमित कर्तव्यों के अलावा, भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग (एनसीआईएसएम) द्वारा निर्धारित सार्वजनिक स्वास्थ्य पर ऑनलाइन कार्यक्रम को पूरा करेगा।

(vii) प्राथमिक स्वास्थ्य केंद्र या सामुदायिक केंद्र या ग्रामीण अस्पताल या जिला अस्पताल या सिविल अस्पताल या आधुनिक चिकित्सा या आयुर्वेदिक अस्पताल या डिस्पेंसरी के किसी भी सरकारी अस्पताल में विशिखानुप्रवेश प्रशिक्षण– प्राथमिक स्वास्थ्य केंद्र या ग्रामीण अस्पताल या सामुदायिक स्वास्थ्य केंद्र या जिला अस्पताल या आधुनिक चिकित्सा या आयुर्वेदिक अस्पताल या औषधालय के किसी भी मान्यता प्राप्त या अनुमोदित अस्पताल में छह महीने के विशिखानुप्रवेश प्रशिक्षण के दौरान, प्रशिक्षणार्थी –

(ए) प्राथमिक स्वास्थ्य केंद्र की दिनचर्या और उनके रिकॉर्ड के रखरखाव से परिचित होना;

(बी) ग्रामीण और दूरदराज के क्षेत्रों में अधिक प्रचलित बीमारियों और उनके प्रबंधन से परिचित होना;

(सी) ग्रामीण आबादी को स्वास्थ्य परिचर्या विधियों के शिक्षण तथा विभिन्न प्रतिरक्षण कार्यक्रमों में शामिल करना;

(डी) प्राथमिक स्वास्थ्य केंद्र के चिकित्सा या गैर–चिकित्सा कर्मचारियों के नियमित कामकाज से परिचित होना और इस अवधि में हमेशा कर्मचारियों के संपर्क में रहना;

(ई) दैनिक रोगी रजिस्टर, परिवार नियोजन रजिस्टर, सर्जिकल रजिस्टर आदि जैसे प्रासंगिक रजिस्टर को बनाए रखने के काम से परिचित हो जाए और विभिन्न सरकारी स्वास्थ्य योजनाओं या कार्यक्रमों में सक्रिय भागीदारी लें;

(एफ) राज्य सरकार द्वारा कार्यान्वित विभिन्न राष्ट्रीय स्वास्थ्य कार्यक्रमों में सक्रिय रूप से भाग लेना।

(viii) **इलेक्ट्रॉनिक लॉगबुक**–(ए) एक प्रशिक्षु के लिए यह अनिवार्य होगा कि वह एक विनिर्दिष्ट ई–लॉगबुक में दिन–प्रतिदिन के आधार पर उसके द्वारा की गई/सहायता/देखी गई प्रक्रियाओं का रिकॉर्ड बनाए रखे और प्रशिक्षु कार्य का एक रिकॉर्ड बनाए रखेगा, जिसे चिकित्सा अधिकारी या यूनिट या विभाग के प्रमुख द्वारा सत्यापित और प्रमाणित किया जाना है, जिसके तहत वह काम करता है।

(बी) विशिखानुप्रवेश प्रशिक्षण कार्यक्रम के अंत में डीन/प्रिंसिपल/निदेशक को संबंधित प्राधिकारी द्वारा विधिवत रूप से प्रमाणित सभी प्रकार से पूर्ण ई–लॉगबुक का उत्पादन करने में विफलता के परिणामस्वरूप विशिखानुप्रवेश प्रशिक्षण कार्यक्रम के किसी भी या सभी विषयों में उसका निष्पादन रद्द हो सकता है।

(सी) संस्था पूर्ण और प्रमाणित ई–लॉगबुक की सॉफ्ट कॉपी अपने पास रखेगी और सत्यापन के लिए उपलब्ध कराई जाएगी।

(ix) **विशिखानुप्रवेश का मूल्यांकन**– (ए) मूल्यांकन प्रणाली उम्मीदवार के कौशल का आकलन करेगी, जबकि एक उद्देश्य के साथ सूचीबद्ध प्रक्रियाओं की न्यूनतम संख्या का प्रदर्शन करेगी कि इन प्रक्रियाओं के सफल सीखने से उम्मीदवारों को अपने वास्तविक अभ्यास में इसका संचालन करने में सक्षम बनाया जा सके।

(बी) मूल्यांकन प्रत्येक पोस्टिंग के अंत में संबंधित विभाग/यक्ष द्वारा किया जाएगा और रिपोर्टों को **अनुलग्नक–1** के तहत प्रपत्र –1 में संस्थान के प्रमुख को प्रस्तुत किया जाएगा।

(सी) सार्वजनिक स्वास्थ्य पर ऑनलाइन पाठ्यक्रम सहित अनिवार्य परिभ्रामीविशिखानुप्रवेश के एक वर्ष के पूरा होने पर, संस्थान के प्रमुख संबंधित तैनाती के अंत में विभिन्न विभागाध्यक्ष द्वारा प्रदान किए गए **अनुलग्नक–1** के तहत निर्धारित प्रपत्र–1 में सभी मूल्यांकन रिपोर्टों का मूल्यांकन करते हैं और यदि संतोषजनक पाए जाते हैं, तो प्रशिक्षु को 7 कार्य दिवसों के भीतर **अनुलग्नक–2** के तहत प्रपत्र–2 में विशिखानुप्रवेश पूर्णता प्रमाण पत्र जारी किया जाएगा।

(डी) यदि किसी उम्मीदवार का प्रदर्शन **अनुलग्नक–2** के तहत फॉर्म –2 के अनुसार पंद्रह अंक से कम या पचास प्रतिशत से कम प्राप्त करने पर असंतोषजनक घोषित किया जाता है। इंटर्नशिप प्रशिक्षण और पोस्टिंग में उस विभाग के लिए निर्धारित दिनों की कुल संख्या में से। अंकों की, किसी भी विभाग में मूल्यांकन में उसे संबंधित विभाग में तीस प्रतिशत की अवधि के लिए पोस्टिंग दोहराना आवश्यक होगा। इंटर्नशिप प्रशिक्षण और पोस्टिंग में उस विभाग के लिए निर्धारित दिनों की कुल संख्या में से।

(इ) उम्मीदवार को अपने मूल्यांकन के पूरा होने की तारीख से तीन दिनों के भीतर संबंधित विभागाध्यक्ष और संस्थान के प्रमुख को अलग–अलग मूल्यांकन के संचालन और अंक प्रदान करने के किसी भी पहलू में अपनी शिकायत दर्ज करने का अधिकार होगा, और ऐसी शिकायत की प्राप्ति पर, संस्था के प्रमुख संबंधित विभाग के प्रमुख के परामर्श से शिकायत का समाधान और निपटान सात कार्य दिवसों के भीतर सौहार्दपूर्ण करेंगे।

(x) प्रशिक्षणार्थी के लिए अवकाश – (ए) एक वर्ष की अनिवार्य परिभ्रामीविशिखानुप्रवेश के दौरान, 12 अवकाश की अनुमति दी जाती है और 12 दिनों से परे किसी भी प्रकार की अनुपस्थिति को तदनुसार बढ़ाया जाएगा।

(बी) प्रशिक्षणार्थी एक समय में किसी भी प्रकार की अवकाश के समय, पहले या बाद में 6 दिनों से अधिक समय नहीं ले सकता है।

(xi) विशिखानुप्रवेश का पूरा होना यदि अपरिहार्य परिस्थितियों के कारण विशिखानुप्रवेश के दौरान विशिखानुप्रवेश शुरू होने में कोई देरी या असामान्य अवरोध, तो ऐसे मामलों में विशिखानुप्रवेश अवधि तीसरे (अंतिम) व्यवसायिक बी.ए.एम.एस. की योग्यता परीक्षा पास करने की तारीख से तीन साल की अधिकतम अवधि के भीतर पूरी की जाएगी। बी.ए.एम.एस जिसमें पहले और दूसरे व्यवसायिक विषय और 9 ऐच्छिक शामिल हैं, विशिखानुप्रवेश के लिए पात्रता के रूप में निर्दिष्ट है।

बशर्ते कि ऐसे मामलों में, छात्र को सभी सहायक दस्तावेजों के साथ लिखित रूप में संस्था के प्रमुख से पूर्व अनुमति प्राप्त होगी और यह संस्थान के प्रमुख की जिम्मेदारी होगी कि वह दस्तावेजों की जांच करे, और अनुमति पत्र जारी करने से पहले अनुरोध की वास्तविक प्रकृति का आकलन करे और विशिखानुप्रवेश में शामिल होने के दौरान, छात्र सहायक दस्तावेजों के साथ अनुरोध पत्र प्रस्तुत करेगा, और उप–विनियमन (ए) में उल्लेखित सभी आवश्यक दस्तावेज और उप–विनियमन (डी) में उल्लेखित विशिखानुप्रवेश अभिन्यास कार्यक्रम से गुजरते हैं।

16 शिक्षा शुल्क– संबंधित शासी या शुल्क निर्धारण समितियों द्वारा निर्धारित और निर्धारित शिक्षा शुल्क जैसा कि लागू होता है, केवल साढ़े चार वर्षों के लिए लिया जाएगा और परीक्षाओं में असफल होने की स्थिति में या किसी अन्य कारण से अध्ययन की विस्तारित अवधि के लिए कोई शिक्षा शुल्क नहीं लिया जाएगा और उसी संस्थान में विशिखानुप्रवेश करने के लिए कोई शुल्क नहीं लिया जाएगा।

17. शिक्षण स्टाफ के लिए अर्हताएं और अनुभव– (ए) आवश्यक अर्हता–(i) किसी विश्वविद्यालय से आयुर्वेद में स्नातक उपाधी या इसके समकक्ष जैसा कि भारतीय चिकित्सा केंद्रीय परिषद या अधिनियम के तहत भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा मान्यता प्राप्त है।

(ii) अधिनियम के अंतर्गत भारतीय चिकित्सा केन्द्रीय परिषद या भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा मान्यता प्राप्त विश्वविद्यालय से संबंधित विषय या विशेषता में आयुर्वेद में स्नातकोत्तर अर्हता;

(iii) संबंधित राज्य बोर्ड या परिषद के साथ एक वैध पंजीकरण जहां वह नियोजित है या भारतीय चिकित्सा केंद्रीय परिषद या भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा जारी एक वैध केंद्रीय या राष्ट्रीय पंजीकरण प्रमाण पत्र;

"यह गैर–चिकित्सा योग्यता के शिक्षकों के लिए लागू नहीं है,"

(iv) संस्कृत के शिक्षक के लिए अर्हता विश्वविद्यालय अनुदान आयोग द्वारा मान्यता प्राप्त संस्कृत में स्नातकोत्तर डिग्री होगी और स्नातक स्तर पर आयुर्वेदिक चिकित्सा एवं शल्य चिकित्सा मे स्नातक योग्यता वाले उम्मीदवार और संस्कृत में एमए को प्राथमिकता दी जाएगी।

(v) आयुर्वेद चिकित्सा में स्नातक डिग्री रखने वाले और अधिनियम की धारा 2 के खंड (एच) के अनुसार प्रासंगिक आधुनिक विज्ञान विषयों में स्नातकोत्तर करने वाले और जैसा कि उल्लेखित इन विनियमों में से अनुभाग 10 का उल्लेख किया गया है और विश्वविद्यालय अनुदान आयोग/वैज्ञानिक और औद्योगिक अनुसंधान परिषद/ भारतीय आयुर्विज्ञान अनुसंधान परिषद

राष्ट्रीय पात्रता परीक्षा योग्यता रखने वाले शिक्षक राष्ट्रीय शिक्षक पात्रता परीक्षा को अर्हता प्राप्त किए बिना में नियुक्त करने के लिए पात्र होंगे।

(vi) किसी मान्यता प्राप्त विश्वविद्यालय या संस्था से प्राप्त निम्नलिखित अर्हताओं वाले शिक्षक को संबंधित विभागों में निम्नलिखित तालिका के अनुसार नियुक्त किया जा सकता है, अर्थात् –

तालिका–17

(नियुक्ति के लिए योग्यता और विभाग)

क्रम संख्या	योग्यता	विभाग
1	बी.ए.एम.एस. और एमएससी एनाटॉमी	रचना–शारीर
2	बी.ए.एम.एस और एमएससी फिजियोलॉजी	क्रिया–शारीर
3	बी.ए.एम.एस और एम पी एच	स्वस्थवृत और योग
4	बी.ए.एम.एस और एम.एससी आयुर जीवविज्ञान	संहिता और सिद्धांत

उपर्युक्त योग्यता वाले शिक्षक निर्दिष्ट विभागों में एक से अधिक नहीं होंगे।

(बी) अनुभव– (i) प्राध्यापक (प्रोफेसर) के पद हेतु –

(ए) संबंधित विषय में नियमित शिक्षक के रूप में 10 साल का शिक्षण अनुभव या संबंधित विषय में नियमित आधार पर सह–आचार्य (प्रवाचक) (एसोसिएट प्रोफेसर) के रूप में 5 साल का शिक्षण अनुभव या

(बी) केंद्र सरकार या राज्य सरकार या संघ राज्य क्षेत्र या विश्वविद्यालय या राष्ट्रीय संस्थान या परीक्षण और अंशांकन प्रयोगशालाओं के लिए राष्ट्रीय प्रत्यायन बोर्ड (एनएबीएल) मान्यता प्राप्त अनुसंधान प्रयोगशाला की अनुसंधान परिषदों में पूर्णकालिक शोधकर्ता के रूप में (संबंधित विषय में स्नातकोत्तर योग्यता रखने के बाद) के रूप में 10 साल का शोध अनुभव या केंद्र सरकार में नियमित सेवा में 10 साल का अनुभव (संबंधित विषय में स्नातकोत्तर योग्यता रखने के बाद) स्वास्थ्य सेवाएं या राज्य सरकार की स्वास्थ्य सेवाएं, आयुष मंत्रालय या 10 साल का अनुभव (संबंधित विषय में स्नातकोत्तर योग्यता रखने के बाद) भारतीय चिकित्सा की केंद्रीय परिषद में सहायक रजिस्ट्रार या रजिस्ट्रार के रूप में, जिसने राष्ट्रीय शिक्षक पात्रता परीक्षा उत्तीर्ण की है, जिस तारीख से यह चल रही है और निम्नलिखित तीन मानदंडों में से किसी एक के साथ, अर्थात्–

(i) सूचकांक पत्रिकाओं (यूजीसी–केयर, पबमेड, वेब ऑफ साइंस, साइंस साइटेशन इंडेक्स, स्कोपस) में प्रकाशित न्यूनतम पांच शोध लेख; नहीं तो

(ii) सूचकांक पत्रिकाओं (यूजीसी–केयर, पबमेड, वेब ऑफ साइंस, साइंस साइटेशन इंडेक्स, एससीओपीओएस) में प्रकाशित कम से कम तीन शोध लेख और आयुर्वेद के लिए प्रासंगिक एक प्रकाशित पुस्तक या नियमावली; नहीं तो

(iii) किसी भी प्रमुख अनुसंधान परियोजना के लिए अन्वेषक (स्वीकृत पत्र के अनुसार परियोजना की अवधि तीन वर्ष और उससे अधिक); और

(iv) शल्य, शालाक्य और स्त्री रोग एवं प्रसूति तंत्र के विषयों या विशेषता को छोड़कर संबंधित विषय में स्नातकोत्तर अर्हता प्राप्त करनाः

बशर्ते कि सेवारत उम्मीदवार अपनी आयु के 45 वर्ष पूरा होने से पहले संबंधित विषय में अपना स्नातकोत्तर पूरा कर लेगा।

(ii) सह–आचार्य (प्रवाचक) (एसोसिएट प्रोफेसर) के पद के लिए–

(ए) संबंधित विषय में नियमित व्याख्याता (असिस्टेंट प्रोफेसर) के रूप में 5 साल का शिक्षण अनुभव नहीं तो

(बी) केंद्र सरकार या राज्य सरकार या केंद्र शासित प्रदेश या विश्वविद्यालय या राष्ट्रीय संस्थानों की अनुसंधान परिषदों या परीक्षण और अंशांकन प्रयोगशालाओं के लिए राष्ट्रीय प्रत्यायन बोर्ड (एनएबीएल) मान्यता प्राप्त अनुसंधान प्रयोगशालाओं में पूर्णकालिक शोधकर्ता (संबंधित विषय में स्नातकोत्तर योग्यता रखने के बाद) के रूप में 5 साल का शोध अनुभव या नियमित सेवा में 5 साल का अनुभव (संबंधित विषय में स्नातकोत्तर योग्यता रखने के बाद) केंद्रीय में सरकारी स्वास्थ्य सेवाएं या राज्य सरकार की स्वास्थ्य सेवाएं, आयुष मंत्रालय या पांच साल का अनुभव (संबंधित विषय में स्नातकोत्तर योग्यता रखने के बाद) भारतीय चिकित्सा की केंद्रीय परिषद में सहायक रजिस्ट्रार या रजिस्ट्रार के रूप में, जिसने राष्ट्रीय शिक्षक पात्रता परीक्षा को उस तारीख से उत्तीर्ण किया है जब यह चालू है और निम्नलिखित तीन मानदंडों में से किसी एक के साथ, अर्थात्–(i) अनुक्रमित पत्रिकाओं (यूजीसी–केयर, पबमेड, वेब ऑफ साइंस, साइटेशन इंडेक्स, स्कोपस) में प्रकाशित न्यूनतम तीन शोध लेख नहीं तो

(ii) अनुक्रमित पत्रिकाओं (यूजीसी–केयर, पबमेड, वेब ऑफ साइंस, साइंस एसिप्रेस इंडेक्स, स्कोपस) और आयुर्वेद से संबंधित एक प्रकाशित पुस्तक या नियमावली में प्रकाशित कम से कम एक शोध लेख नहीं तो

(iii) किसी भी प्रमुख अनुसंधान परियोजना (स्वीकृत पत्र के अनुसार परियोजना की अवधि तीन वर्ष और उससे अधिक की अवधि) या लघु अनुसंधान परियोजना (स्वीकृत पत्र के अनुसार परियोजना की अवधि तीन वर्ष से कम की अवधि) के लिए अन्वेषक और

(iv) शल्य, शालाक्य और स्त्री रोग एवं प्रसुति तंत्र के विषयों या विशेषताओं को छोड़कर संबंधित विषय में स्नातकोत्तर अर्हता प्राप्त करना है।

बशर्ते कि सेवारत उम्मीदवार अपनी आयु के 45 वर्ष पूरा होने से पहले संबंधित विषय में अपना स्नातकोत्तर पूरा कर लेगा।

(iii) **सहायक आचार्य अथवा व्याख्याता (असिस्टेंट प्रोफेसर) के पद के लिए**– किसी भी शिक्षण अनुभव की आवश्यकता नहीं होगी, लेकिन, पहली नियुक्ति के समय आयु 45 वर्ष से अधिक नहीं होगी।

(iv) अनुसंधान पद्धति और चिकित्सा सांख्यिकी के शिक्षक के लिए अर्हता चिकित्सा सांख्यिकी या बायोस्टैटिस्टिक्स या महामारी विज्ञान या अनुसंधान पद्धति या चिकित्सा सांख्यिकी के अन्य प्रासंगिक अनुशासन में स्नातकोत्तर उपाधी होगी–

बशर्ते कि आयुर्वेद के स्नातकोत्तर, जिन्होंने अपने स्नातकोत्तर में एक विषय के रूप में अनुसंधान पद्धति या चिकित्सा सांख्यिकी का अध्ययन किया है, और आयुर्वेद के स्नातकोत्तर, जिन्होंने भारतीय चिकित्सा अनुसंधान परिषद के राष्ट्रीय महामारी विज्ञान संस्थान द्वारा आयोजित अनुसंधान पद्धति या चिकित्सा सांख्यिकी में ऑनलाइन पाठ्यक्रम सफलतापूर्वक पूरा कर लिया है, वे भी अनुसंधान पद्धति और चिकित्सा सांख्यिकी के विषय को पढ़ाने के लिए पात्र होंगे और उन्हें प्राथमिकता दी जाएगी। नियुक्ति के समय और अनुसंधान पद्धति और चिकित्सा सांख्यिकी के शिक्षक को अंशकालिक आधार पर नियुक्त किया जा सकता है और यह स्वस्थवृत्त और योग विभाग के तहत काम करेगा और ऐसे अंशकालिक शिक्षकों को शिक्षक कोड प्रदान नहीं किया जाएगा।

(v) योग प्रशिक्षक (पूर्णकालिक) के लिए योग्यता योग में स्नातक की डिग्री न्यूनतम होगी और यह स्वस्थवृत्त और योग विभाग के तहत काम करेगी। स्वस्थवृत में स्नातकोत्तर भी इसके लिए पात्र होंगे। अनुदेशक पद के लिए शिक्षक कोड नहीं होगा।

(vi) सहायक प्रोफेसर या व्याख्याता के रूप में संस्कृत शिक्षक सहित एमएससी एनाटॉमी, एमएससी फिजियोलॉजी, एमपीएच और एमएससी आयुर जीव विज्ञान की योग्यता के साथ नियुक्त शिक्षक सात साल के अनुभव के बाद रीडर या एसोसिएट प्रोफेसर के पद और प्रोफेसर के पद के लिए बारह साल के शिक्षण अनुभव के लिए पात्र होंगे और ऐसे शिक्षक विभागाध्यक्ष के साथ–साथ संस्थान के प्रमुख के पद के लिए पात्र नहीं होंगे।

(vii) डॉक्टर ऑफ फिलॉसफी (पीएचडी) का शोध अनुभव– वास्तविक अनुसंधान अवधि अर्थात् थीसिस जमा करने की तारीख से जुड़ने की तारीख और तीन साल से अधिक नहीं, शिक्षण अनुभव और पीएचडी सीट आवंटन पत्र, पूर्णकालिक पीएचडी कार्यक्रम में शामिल होने का प्रमाण और विश्वविद्यालय को थीसिस प्रस्तुत करने के प्रमाण को इस संबंध में सबूत के रूप में माना जाएगा।

(viii) शिक्षक की अस्थायी नियुक्ति या अस्थायी पदोन्नति पर पात्रता के लिए विचार नहीं किया जाएगा।

(ix) शिक्षक के रूप में चिकित्सा अधिकारी की प्रतिनियुक्ति के मामले में, यह इस विनियमन में विनिर्दिष्ट योग्यताओं, पदनामों और अनुभव के साथ होगा और प्रतिनियुक्ति तीन वर्ष से कम नहीं होगी और कोई भी आपातकालीन वापसी उचित प्रतिस्थापन या ऐच्छिक व्यवस्था के बाद होगी।

(x) संबद्ध विषयों में नियुक्त किए गए शिक्षकों को, यदि मूल विभाग में लौटने की इच्छा है, तो वे इस विनियमन की अधिसूचना की तारीख से तीन साल के भीतर वापस आ सकते हैं और ऐसी स्थिति में, भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग अनुमोदित शिक्षकों के संबद्ध विषय के अनुभव को मूल विभाग में नियमित अनुभव के रूप में माना जाएगा और भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग अनुमोदित शिक्षकों के लिए आयोग जो संबद्ध विषयों में बने रहे, उन पर विचार किया जाएगा। संबंधित विभाग के नियमित शिक्षक के रूप में और इस विनियमन में निर्दिष्ट के रूप में नियमित शिक्षक के रूप में पदोन्नति के लिए पात्र है।

(सी) संस्थान के प्रमुख के पद के लिए योग्यता और अनुभव.–संस्थान के प्रमुख (प्रिंसिपल या डीन या निदेशक) के पद के लिए योग्यता और अनुभव वही योग्यता और अनुभव होगा जो न्यूनतम तीन साल के प्रशासनिक अनुभव (वाइस प्रिंसिपल या विभागाध्यक्ष या उप चिकित्सा अधीक्षक या चिकित्सा अधीक्षक आदि) के साथ प्रोफेसर के पद के लिए निर्दिष्ट किया गया है।

(डी) वेतन– (ए) सरकारी अथवा सरकारी सहायता प्राप्त संस्थान या सरकारी डीम्ड–विश्वविद्यालय के शिक्षक के लिए– जैसा भी लागू हो, गैर–अभ्यास भत्तों सहित वेतन और भत्तों का भुगतान शिक्षक को केन्द्र सरकार या विश्वविद्यालय अनुदान आयोग या राज्य सरकार या संघ राज्य क्षेत्र द्वारा निर्धारित मानदंडों के समान किया जाएगा, जैसा भी मामला हो और चिकित्सा प्रणालियों के बीच वेतन संरचना की कोई विसंगति नहीं होगी।

(बी) केन्द्रीय निजी डीम्ड–विश्वविद्यालय या राज्य निजी डीम्ड–विश्वविद्यालय सहित स्व–वित्तपोषित महाविद्यालय के शिक्षक के लिए–(i) न्यूनतम मूल वेतन निम्नलिखित सारणी के अनुसार होगा, अर्थात–

तालिका–18

(न्यूनतम मासिक वेतन)

क्रम संख्या	पद	वेतनमान
1.	व्याख्याता (असिस्टेंट प्रोफेसर)	पे लेवल–10, पे मैट्रिक्स 56,100–1,77,500 रुपये (7वें सीपीसी के अनुसार)
2.	प्रवाचक (एसोसिएट प्रोफेसर)	पे लेवल–12, पे मैट्रिक्स 78,800–2,09,200 रुपये (7वें सीपीसी के अनुसार)
3.	प्राध्यापक (प्रोफेसर)	पे लेवल–13, पे मैट्रिक्स 1,23,100–2,15,900 रुपये (7वें सीपीसी के अनुसार)
4.	संस्था के प्रमुख	पे लेवल–13ए, पे मैट्रिक्स 1,31,100–2,16,600 रुपये (7वें सीपीसी के अनुसार)

(ii) (ए) यह न्यूनतम निर्धारित वेतन होगा और उच्चतर वेतन संरचना के लिए प्रतिबंधात्मक नहीं होगा।

(बी) मासिक वेतन का भुगतान संबंधित नियोक्ता नीति के अनुसार लागू भत्तों और संबंधित संवर्ग या पद के अनुभव के वर्ष के संबंध में वार्षिक वेतन वृद्धि के साथ किया जाएगा।

(सी) वह संस्थान जो पहले से ही अधिक वेतन संरचना का भुगतान कर रहा है, उसी के साथ जारी रहेगा।

(डी) जब भी केन्द्रीय वेतन आयोग (सीपीसी) वेतनमानों में संशोधन करेगा, तब लागू तदनुरूपी वेतन संरचना को अपनाया जाएगा।

(सी) वेतन बैंक अंतरण के माध्यम से वेतन खाते में जमा किया जाएगा और शिक्षक को आवश्यक सुविधाएं जैसे भविष्य निधि या कर्मचारी राज्य बीमा, आदि कॉलेज द्वारा प्रदान किए जाएंगे और आयकर कटौती प्रमाण पत्र जैसे कि प्रपत्र 16 वर्ष कॉलेज द्वारा शिक्षक को मौजूदा के मानदंडों के अनुसार जारी किया जाएगा।

(डी) कॉलेज नियुक्ति और पदोन्नति आदेश जारी करेगा जिसमें वेतन, इस्तीफे के लिए नोटिस अवधि, शिक्षक द्वारा रखी जाने वाली न्यूनतम उपस्थिति जैसे विवरणों का स्पष्ट रूप से उल्लेख किया जाएगा।

(ई) **शिक्षक की सेवानिवृत्ति की आयु**– शिक्षकों की सेवानिवृत्ति की आयु केंद्र सरकार या राज्य सरकार या संघ राज्य क्षेत्र के आदेश के अनुसार होगी और शिक्षकों के पात्रता मानदंडों को पूरा करने वाले सेवानिवृत्त शिक्षकों को पूर्णकालिक शिक्षक के रूप में 65 वर्ष की आयु तक पुनः नियोजित किया जा सकता है।

(एफ) **यूनिक टीचर कोड** –(i) सभी पात्र शिक्षकों के लिए एक यूनिक टीचर कोड, भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा कॉलेज में उनकी नियुक्ति के बाद एक ऑनलाइन शिक्षक प्रबंधन प्रणाली के माध्यम से नियुक्ति के बाद, शामिल होने की तारीख से सात कार्य दिवसों के भीतर आवेदन पर आवंटित किया जाएगा और ऐसे सभी शिक्षकों के विभाग की पदोन्नति या कार्यमुक्ति या स्थानांतरण को ऑनलाइन शिक्षक प्रबंधन प्रणाली (ओटीएमएस) के माध्यम से सुविधाजनक और निगरानी की जाएगी।

(ii) संस्थान और शिक्षक पदोन्नति, विभाग स्थानांतरण, कार्यमुक्ति आदि के संबंध में समय–समय पर ऑनलाइन शिक्षक प्रबंधन प्रणाली (ओटीएमएस) में प्रोफाइल अपडेट करेंगे।

(जी) आयोग के पास नैतिक और अनुशासनात्मक आधार पर शिक्षक संहिता को वापस लेने की शक्ति होगी।

(एच) आयोग के पास शिक्षक के कोड को वापस लेने या रोकने की शक्ति होगी यदि शिक्षक शिक्षण व्यवसाय को बंद कर देता है या किसी भी कारण से किसी भी संस्थान में शामिल नहीं होता है और वह समय–समय पर भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा निर्दिष्ट प्रक्रिया को पूरा करने के बाद उसी शिक्षक के कोड के साथ शिक्षण व्यवसाय में फिर से शामिल हो सकता है।

(आई) **शिक्षक की उपस्थिति**– शिक्षक समय–समय पर भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग द्वारा निर्धारित दिशा–निर्देशों और अधिदेशों का पालन करेगा प्रत्येक कैलेंडर वर्ष के कार्य दिवसों के दौरान उपस्थिति कम से कम 75 प्रतिशत होगी

(जे) **संकाय सदस्यों का विकास और प्रशिक्षण**– प्रत्येक तीन वर्षों में एक बार शिक्षकों को भारतीय चिकित्सा पद्धति राष्ट्रीय आयोग या नामित प्राधिकरण द्वारा संचालित चिकित्सा शिक्षा प्रौद्योगिकी (एमईटी) या गुणवत्ता इनपुट कार्यक्रम (क्यूआईपी) से गुजरना होगा

18 आयुर्वेद में परीक्षक की नियुक्ति–संबंधित विषय में न्यूनतम पांच वर्ष के शिक्षण अनुभव के साथ नियमित या सेवानिवृत्त शिक्षक के अलावा किसी अन्य व्यक्ति को जांच के लिए पात्र नहीं माना जाएगा और परीक्षक की अधिकतम आयु सीमा 65 वर्ष होगी।

नोटः

(ए) पुराने नामकरण नामत आयुर्वेद वाचस्पति–आयुर्वेद सिद्धान्त, आयुर्वेद वाचस्पति–आयुर्वेद संहिता, आयुर्वेद वाचस्पति–आयुर्वेद क्रियाशरीर, (दोष–धातू–मल विज्ञान) और आयुर्वेद वाचस्पति–भैषज्य कल्पना में स्नातकोत्तर डिग्री धारक, जैसा कि स्नातकोत्तर शिक्षा विनियम, 2005 में उल्लेखित है, संबंधित विभाग में नियुक्त किया जा सकता है, जैसे कि क्रिया शरीर विभाग में दोष धातु मालवीय के धारक, आयुर्वेद संहिता एवं सिद्धांत विभाग में संहिता के धारक, रस शास्त्र एवं भैषज्य कल्पना विभाग में भैषज्य कल्पना के धारक और इसी तरह, पुराने नामकरण में स्नातकोत्तर डिग्री धारक, अर्थात् आयुर्वेद धनवंतरि – शल्य सामान्य –I, आयुर्वेद धनवंतरि – क्षार कर्म एवं अनुशस्त्र कर्म, आयुर्वेद धनवंतरि – शालाक्य – नेत्र रोग, आयुर्वेद धनवंतरि – शालाक्य – शिरो नासा कर्ण एवं कंठ रोग, आयुर्वेद धनवंतरि – शालाक्य – दंत एवं मुख रोग, आयुर्वेद

वाचस्पति संज्ञाहरण, आयुर्वेद वाचस्पति – छाया एवं विकिरण विज्ञान, आयुर्वेद धनवंतरि – अस्थि एवं संधि एवं मर्मगत रोग और आयुर्वेद वाचस्पति– स्वस्थ वृत्त और योग जैसा कि स्नातकोत्तर शिक्षा विनियम, 2012 में उल्लेख किया गया है, को संबंधित विभाग में नियुक्त किया जा सकता है, जैसे कि शल्य के विभाग में शल्य – सामान्य के धारक, शल्य विभाग में क्षार कर्म एवं अनुशस्त्र कर्म के धारक, शालाक्य विभाग में शालाक्य – नेत्र रोग के धारक, शालाक्य विभाग में शालाक्य के धारक – शिरो नासा कर्ण एवं कंठ रोग धारक ,शालाक्य विभाग में शालाक्य दंत एवं मुख रोग के धारक, शल्य विभाग में संज्ञाहरण के धारक, रोग निदान विभाग में छाया एवं विकिरण विज्ञान के धारक, शल्य के विभाग में अस्थि संधि और मर्मगत रोग के धारक और स्वस्थ वृत्त विभाग में स्वस्थवृत्त एवं योग के धारक।

(बी) भारतीय चिकित्सा केन्द्रीय परिषद (स्नातकोत्तर आयुर्वेद शिक्षा) विनियम, 2016 में उल्लेखित आयुर्वेद वाचस्पति–योग नामक नवविकसित विशेषता के स्नातकोत्तर डिग्री धारक को स्वस्थवृत्त और योग विभाग में नियुक्त किया जा सकता है। रसायन और वाजीकरण और मानसरोग के स्नातकोत्तर धारकों को काय चिकित्सा में नियुक्त किया जा सकता है।

रघुराम भट्ट उ.,प्रभारी सचिव

[विज्ञापन-III/4/असा./647/2021–22]

परिशिष्ट "ए"

[विनियमन 5 (4) देखें]

विकलांग व्यक्तियों के अधिकार अधिनियम, 2016 (2016 का 49) की धारा 2 के खंड (जेडसी) में निर्दिष्ट "निर्दिष्ट विकलांगता" से संबंधित अनुसूची, निम्नानुसार प्रदान करती हैः –

1. शारीरिक विकलांगता–

(ए) लोको मोटर विकलांगता (मस्कुलोस्केलेटल या तंत्रिका तंत्र या दोनों के पीड़ा के परिणामस्वरूप स्वयं और वस्तुओं के गति से जुड़ी विशिष्ट गतिविधियों को निष्पादित करने में किसी व्यक्ति की असमर्थता), जिसमें शामिल हैं–

(ए)"कुष्ठ रोग से ठीक हो चुके व्यक्ति" का अर्थ है एक ऐसा व्यक्ति जो कुष्ठ रोग से ठीक हो गया है लेकिन इससे पीड़ित है–

(i) हाथों या पैरों में संवेदना की हानि के साथ–साथ आंखों और पुतली में सनसनी और पैरेसिस की हानि लेकिन बिना किसी प्रकट विकृति के,

(ii) प्रकट विकृति और पैरेसिस लेकिन उनके हाथों और पैरों में पर्याप्त गतिशीलता होने से उन्हें सामान्य आर्थिक गतिविधि में संलग्न होने में सक्षम बनाया जा सके,

(iii) अत्यधिक शारीरिक विकृति के साथ–साथ उन्नत आयु जो उसे किसी भी लाभकारी व्यवसाय को करने से रोकती है, और "कुष्ठ रोग से ठीक होने पर" अभिव्यक्ति का तदनुसार अर्थ होगा।

(ए) "सेरेब्रल पाल्सी" का अर्थ है गति न करने वाला नस से संबंधित स्थिति का एक समूह जो शरीर केगति और मांसपेशियों के समन्वय को प्रभावित करता है, जो मस्तिष्क के एक या अधिक विशिष्ट क्षेत्रों को नुकसान के कारण होता है, आमतौर पर जन्म से पहले, दौरान या कुछ ही समय बाद होता है।

(बी) "बौनापन" का अर्थ एक चिकित्सा या आनुवंशिक स्थिति है जिसके परिणामस्वरूप वयस्क ऊंचाई 4 फीट 10 इंच (147 सेंटीमीटर) या उससे कम होती है,

(ए) "मस्कुलर डिस्ट्रॉफी" का अर्थ वंशानुगत आनुवंशिक मांसपेशियों की बीमारी का एक समूह है जो मांसपेशियों को कमजोर करता है जो मानव शरीर को स्थानांतरित करते हैं और कई डिस्ट्रॉफी वाले व्यक्तियों के जीन में गलत और गायब जानकारी होती है, जो उन्हें स्वास्थ्य मांसपेशियों के लिए आवश्यक प्रोटीन बनाने से रोकती है। यह प्रगतिशील कंकाल की मांसपेशियों की कमजोरी, मांसपेशियों के प्रोटीन में दोष, और मांसपेशियों की कोशिकाओं और ऊतक की मृत्यु की विशेषता है,

(बी)"एसिड हमले के पीड़ितों" का अर्थ है कि एसिड या इसी तरह के संक्षारक पदार्थ को फेंककर हिंसक हमलों के कारण विकृत व्यक्ति।

(ए) दृष्टिदोष–

(ए)"अंधापन" का अर्थ एक ऐसी स्थिति से है जहां किसी व्यक्ति को सर्वोत्तम सुधार के बाद निम्नलिखित में से कोई भी स्थिति होती है–

(i) दृष्टि की कुल अनुपस्थिति, या

(ii) दृश्य तीक्ष्णता 3/60 से कम या 1/200 (स्नेलेन) से कम बेहतर आंखों में सर्वोत्तम संभव सुधार के साथ, या

(iii) दृष्टि के क्षेत्र की सीमा जो 10 डिग्री से कम के कोण को कम करती है।

(ए)"निम्न–दृष्टि" का अर्थ एक ऐसी स्थिति से है जहां किसी व्यक्ति को निम्नलिखित में से कोई भी स्थिति होती है, अर्थात् –

(i) दृश्य तीक्ष्णता 6/18 से अधिक या 20/60 से कम 3/60 तक या 10/200 (स्नेलेन) तक सर्वोत्तम संभव सुधारों के साथ बेहतर आंखों में नहीं है; नहीं तो

(ii) 40 डिग्री से कम के कोण को 10 डिग्री तक के कोण को कम करने वाली दृष्टि के क्षेत्र की सीमा।

(ब) सुनने मे कमी–

(ए)"बहरे" का अर्थ उन व्यक्तियों से है जिनके दोनों कानों में भाषण आवृत्तियों में 70 डीबी सुनवाई हानि होती है;

(बी) "सुनने की कठिन" का अर्थ है दोनों कानों में भाषण आवृत्तियों में 60 डीबी सुनाई मे कमी वाला व्यक्ति,

(डी) "भाषण और भाषा विकलांगता" का अर्थ है एक स्थायी विकलांगता जो कार्बनिक या नस संबंधी कारणों के कारण बोलने और भाषा के एक या अधिक घटकों को प्रभावित करने वाली लैरींगेक्टोमी या एफेसिया जैसी स्थितियों से उत्पन्न होती है।

2. बौद्धिक विकलांगता दोनों बौद्धिक कामकाज (तर्क, या सीखने, समस्या को सुलझाने) और एक संप्रदान व्यवहार जो हर दिन, सामाजिक और व्यावहारिक कौशल की एक श्रृंखला को शामिल करता है, दोनों में महत्वपूर्ण सीमा की विशेषता एक शर्त, सहित–

(ए) "विशिष्ट सीखने की अक्षमता" का अर्थ उन स्थितियों का एक विषम समूह है जिसमें बोली जाने वाली या लिखित प्रसंस्करण भाषा में कमी होती है, जो खुद को समझने, बोलने, पढ़ने, लिखने, वर्तनी करने या गणितीय गणना करने में कठिनाई के रूप में प्रकट हो सकती है और इसमें अवधारणात्मक विकलांगता, डिस्लेक्सिया, डिस्ग्राफिया, डिस्कैल्कुलिया, डिस्प्रैक्सिया और विकासात्मक एफासिया जैसी स्थितियां शामिल हैं।

(बी) "ऑटिज्म स्पेक्ट्रम डिसऑर्डर" का अर्थ है एक न्यूरो–विकासात्मक स्थिति जो आमतौर पर जीवन के पहले तीन वर्षों में दिखाई देती है जो किसी व्यक्ति की संवाद करने, रिश्तों को समझने और दूसरों से संबंधित करने की क्षमता को काफी प्रभावित करती है और अक्सर असामान्य या रूढ़िवादी अनुष्ठानों या व्यवहारों से जुड़ी होती है।

3. मानसिक व्यवहार–"बीमारी का मतलब है" का अर्थ है सोच, मनोदशा, धारणा, अभिविन्यास या स्मृति का एक पर्याप्त विकार जो निर्णय, व्यवहार, वास्तविकता को पहचानने की क्षमता या जीवन की सामान्य मांगों को पूरा करने की क्षमता को पूरी तरह से बाधित करता है, लेकिन इसमें मंदता शामिल नहीं है जो किसी व्यक्ति के मन के जकड़े या अधूरे विकास की स्थिति है,

4. विकलांगता के कारण–

(ए) क्रोनिक न्यूरोलॉजिकल स्थितियां, जैसे–

(i) "मल्टीपल स्केलेरोसिस" का अर्थ एक भड़काऊ, तंत्रिका तंत्र रोग है जिसमें मस्तिष्क और रीढ़ की हड्डी की तंत्रिका कोशिकाओं के अक्षतंतुओं के चारों ओर माइलिन म्यान क्षतिग्रस्त हो जाते हैं, जिससे डिमाइलाइजेशन होता है और मस्तिष्क और रीढ़ की हड्डी में तंत्रिका कोशिकाओं की एक दूसरे के साथ संवाद करने की क्षमता को प्रभावित करता है।

(ii) "पार्किंसंस रोग" का अर्थ है तंत्रिका तंत्र की एक प्रगतिशील बीमारी जो कंपन, मांसपेशियों की कठोरता और धीमी गति से, अभेद्य आंदोलन द्वारा चिह्नित होती है, जो मुख्य रूप से मस्तिष्क के बेसल गैन्गिलया के अधरू पतन और न्यूरोट्रांसमीटर डोपामाइन की कमी से जुड़े मध्यम आयु वर्ग और बुजुर्ग लोगों को प्रभावित करती है।

(बी) रक्त विकार–

(i) "हीमोफिलिया" का अर्थ एक विरासत में मिली बीमारी है, जो आमतौर पर केवल पुरुष को प्रभावित करती है, लेकिन महिलाओं द्वारा अपने पुरुष बच्चों को प्रेषित होती है, जो बोल्ड की सामान्य थक्के की क्षमता के नुकसान या हानि की विशेषता है ताकि एक नाबालिग के परिणामस्वरूप घातक रक्तस्राव हो सके,

(ii) "थैलेसीमिया" का अर्थ विरासत में मिले विकारों का एक समूह है जो हीमोग्लोबिन की कम या अनुपस्थित मात्रा की विशेषता है।

(iii) "सिकल सेल रोग" का अर्थ है एक हीमोलिटिक विकार जो क्रोनिक एनीमिया, दर्दनाक घटनाओं और संबंधित ऊतक और अंग क्षति के कारण विभिन्न जटिलताओं की विशेषता है, "हीमोलिटिक" लाल रक्त कोशिकाओं की कोशिका झिल्ली के विनाश को संदर्भित करता है जिसके परिणामस्वरूप हीमोग्लोबिन प्रवाह में आती है,

5. एकाधिक विकलांगता (उपर्युक्त निर्दिष्ट विकलांगताओं में से एक से अधिक) बहरे अंधापन सहित जिसका अर्थ है कि एक ऐसी स्थिति जिसमें किसी व्यक्ति को गंभीर संचार, विकासात्मक और शैक्षिक समस्याओं के कारण सुनवाई और दृश्य हानि का संयोजन हो सकता है।

6. कोई अन्य श्रेणी जिसे केन्द्र सरकार द्वारा समय–समय पर अधिसूचित किया जा सकता है।

परिशिष्ट "बी"

[विनियमन 5 (4) देखें]

विकलांग व्यक्तियों के अधिकार अधिनियम, 2016 (2016 का 49) के तहत "निर्दिष्ट विकलांग" वाले छात्रों के प्रवेश के संबंध में दिशानिर्देश, बी.ए.एम.एस.

1. "विकलांगता प्रमाण पत्र" भारत के राजपत्र, असाधारण, भाग II, धारा 3, उप–धारा (i) में प्रकाशित विकलांग व्यक्तियों के अधिकार नियम, 2017 के अनुसार जारी किया जाएगा, दिनांक 15 जून, 2017 की संख्या जी.एस.आर 591 (ई) के माध्यम से।

2. किसी व्यक्ति में "निर्दिष्ट विकलांगता" की सीमा का मूल्यांकन विकलांग व्यक्तियों के अधिकार अधिनियम, 2016 (2016 का 49)" के तहत शामिल किसी व्यक्ति में निर्दिष्ट विकलांगता की सीमा का आकलन करने के उद्देश्य से दिशा–निर्देशों के अनुसार किया जाएगा, जिसे भारत के राजपत्र, असाधारण, भाग II, धारा 3, उप–धारा (ii) में प्रकाशित किया गया है, संख्या एस.ओ. 76 (ई) के माध्यम से, दिनांक 4 जनवरी, 2018 को लिया गया।

3. विकलांगता की न्यूनतम डिग्री 40: (बेंचमार्क विकलांगता) होनी चाहिए ताकि निर्दिष्ट विकलांगता वाले व्यक्तियों के लिए आरक्षण का लाभ उठाने के लिए पात्र हो सके।

4. 'विकलांग व्यक्ति' (पीडब्लूडी) शब्द का उपयोग 'शारीरिक रूप से विकलांग' (पी एच) शब्द के बजाय किया जाना है

तालिका

<table>
<tr><th rowspan="2">क्रम संख्या</th><th rowspan="2">विकलांगता श्रेणी</th><th rowspan="2">विकलांगता के प्रकार</th><th rowspan="2">निर्दिष्ट विकलांगता</th><th colspan="3">विकलांगता श्रेणी</th></tr>
<tr><th colspan="3">(5)</th></tr>
<tr><td>(1)</td><td>(2)</td><td>(3)</td><td>(4)</td><td>बी.ए.एम.एस कार्यक्रम के लिए पात्र, पीडब्ल्यूडी कोटा के लिए पात्र नहीं</td><td>बी.ए.एम.एस कार्यक्रम के लिए पात्र, पीडब्ल्यूडी कोटा के लिए पात्र</td><td>कार्यक्रम के लिए पात्र नहीं है,</td></tr>
<tr><td rowspan="6">1.</td><td rowspan="6">शारीरिक विकलांगता</td><td rowspan="6">(ए) लोकोमोटर विकलांगता, जिसमें निर्दिष्ट विकलांगता (ए से एफ) शामिल है।</td><td>(ए) कुष्ठ रोग से ठीक हो चुके व्यक्ति'</td><td rowspan="6">40% से कम विकलांगता</td><td rowspan="6">40–80% विकलांगता 80% से अधिक विकलांगता वाले व्यक्तियों को भी मामले–दर–मामला आधार पर अनुमति दी जा सकती है और उनके कार्य को एक अक्षमता सहायक उपकरणों की सहायता मिलेगी, यदि इसका उपयोग किया जा रहा है, तो यह देखने के लिए कि क्या इसे 80% से नीचे लाया गया है और क्या उनके पास कार्यक्रम को आगे बढ़ाने और संतोषजनक ढंग से पूरा करने के लिए आवश्यक पर्याप्त मोटर क्षमता है।</td><td rowspan="6">80% से अधिक</td></tr>
<tr><td>(बी) सेरेब्रल पाल्सी ''</td></tr>
<tr><td>(सी) बौनापन</td></tr>
<tr><td>(डी) मस्क्युलर डिस्ट्रॉफी</td></tr>
<tr><td>(ए) एसिड हमले के शिकार</td></tr>
<tr><td>(बी) अन्य ''' जैसे विच्छेदन, पोलियोमाइलाइटिस आदि।</td></tr>
<tr><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td colspan="4">* उंगलियों और हाथों में संवेदनाओं के नुकसान पर ध्यान दिया जाना चाहिए, विच्छेदन, साथ ही साथ आंखों की भागीदारी और संबंधित सिफारिशों को देखा जाना चाहिए।
** दृष्टि, सुनवाई, संज्ञानात्मक कार्य आदि की हानि पर ध्यान दिया जाना चाहिए और संबंधित सिफारिशों को देखा जाना चाहिए।
*** दोनों हाथों को बरकरार रखते हुए, बरकरार संवेदनाओं के साथ, पर्याप्त शक्ति और गति की सीमा बी.ए.एम.एस कार्यक्रम के लिए पात्र माने जाने के लिए आवश्यक है।</td></tr>
<tr><td rowspan="2">(बी) दृश्य दोष (*)</td><td>(ए) अंधापन</td><td rowspan="2">40% से कम विकलांगता (यानी</td><td rowspan="2"></td><td rowspan="2">40% विकलांगता के बराबर या</td></tr>
<tr><td>(बी) कम दृष्टि</td></tr>
</table>

				श्रेणी 'o (10%)'I (20%)' और II (30%)		उससे अधिक (यानी श्रेणी III और उससे ऊपर)
		(सी) श्रवण हानि /	(ए) बहरा (बी) सुनने में कठिनाई	40% से कम विकलांगता		40% विकलांगता के बराबर या उससे अधिक
			(*) 40% से अधिक की दृश्य हानि/दृश्य विकलांगता वाले व्यक्तियों को स्नातक बी.ए. एम.एस शिक्षा प्राप्त करने के लिए पात्र बनाया जा सकता है और उन्हें आरक्षण दिया जा सकता है, इस शर्त के अधीन कि दृश्य विकलांगता को दूरबीन/आवर्धक आदि जैसे उन्नत कम दृष्टि एड्स के साथ 40% के बेंचमार्क से कम के स्तर पर लाया जाता है। / 40% से अधिक की श्रवण विकलांगता वाले व्यक्तियों को स्नातक बी.ए.एम.एस शिक्षा का पीछा करने के लिए पात्र बनाया जा सकता है और उन्हें आरक्षण दिया जा सकता है, इस शर्त के अधीन कि सुनवाई विकलांगता को सहायक उपकरणों की सहायता से 40/ के बेंचमार्क से कम के स्तर पर लाया जाता है। इसके अलावा, व्यक्ति के पास 60/ से अधिक का भाषण भेदभाव स्कोर होना चाहिए।			
		(डी) आवाज और भाषा विकलांगता	कार्बनिक/न्यूरोलॉजिकल कारण	40% से कम विकलांगता		40% विकलांगता के बराबर या उससे अधिक
		यह प्रस्तावित किया गया है कि बीए.ड एस कार्यक्रम में प्रवेश के लिए भाषण बोधगम्यता प्रभावित (एसआईए) स्कोर 3 से अधिक नहीं होगा (जो 40% से कम के अनुरूप होगा) बी.ए.एम.एस कार्यक्रम को आगे बढ़ाने के लिए पात्र होने के लिए। इस स्कोर से परे के व्यक्ति बी.ए.एम.एसकार्यक्रम में प्रवेश के लिए पात्र नहीं होंगे। 40% तक एक एफिसिया भागफल (एक्यू) वाले व्यक्ति कार्यक्रम को आगे बढ़ाने के लिए पात्र हो सकते हैं, लेकिन इसके अलावा वे न तो बी.ए.एम.एस कार्यक्रम को आगे बढ़ाने के लिए पात्र होंगे और न ही उन्हें कोई आरक्षण होगा।				

2.	बौद्धिक विकलांगता		(ए) विशिष्ट अधिगम विकलांगता (अवधारणात्मक विकलांगता, डिस्लेक्सिया, डिस्कैलकुलिया, डिस्प्रैक्सिया और विकासात्मक एफेसिया) रु.	: वर्तमान में एसपीएलडी की गंभीरता का आकलन करने के लिए कोई परिमाणीकरण पैमाने उपलब्ध नहीं है, इसलिए 40% का कट–ऑफ मनमाना है और अधिक सबूत की आवश्यकता है।		
				40% से कम विकलांगता	40% विकलांगता के बराबर या उससे अधिक लेकिन चयन विशेषज्ञ पैनल द्वारा उपचार/सहायता प्राप्त प्रौद्योगिकी/सहायता/बुनियादी ढांचे के परिवर्तनों की मदद से मूल्यांकन की गई सीखने की योग्यता पर आधारित होगा।	
			(ए) ऑटिज्म स्पेक्ट्रम विकार	अनुपस्थिति या हल्के विकलांगता, एस्पेरर सिंड्रोम (आईएसएए के अनुसार 40–60% की विकलांगता) जहां व्यक्ति को एक विशेषज्ञ पैनल द्वारा बी.ए. एम.एसप्रोग्राम के लिए फिट माना जाता है।	वर्तमान में मानसिक बीमारी की उपस्थिति और सीमा स्थापित करने के लिए उद्देश्य विधि की कमी के कारण अनुशंसित नहीं है। तथापि, विकलांगता मूल्यांकन के बेहतर तरीकों को विकसित करने के बाद भविष्य में आरक्षण/उद्धृत के लाभ पर विचार किया जा सकता है।	60% से अधिक विकलांगता या संज्ञानात्मक/बौद्धिक विकलांगता की उपस्थिति के बराबर या अधिक और यदि व्यक्ति को एक विशेषज्ञ पैनल द्वारा बी.ए.एम.एस कार्यक्रम का पीछा करने के लिए अयोग्य माना जाता है।

3.	मानसिक व्यवहार		मानसिक रोग	अनुपस्थिति या अल्प विकलांगता: 40% से कम (आइडियाज के तहत)	वर्तमान में मानसिक बीमारी की उपस्थिति और सीमा स्थापित करने के लिए उद्देश्य विधि की कमी के कारण अनुशंसित नहीं है। तथापि, विकलांगता मूल्यांकन के बेहतर तरीकों को विकसित करने के बाद भविष्य में आरक्षण/कोटा के लाभ पर विचार किया जा सकता है।	40% विकलांगता के बराबर या उससे अधिक या यदि व्यक्ति को अपने कर्तव्यों को पूरा करने के लिए अयोग्य माना जाता है। मानकों को "चिकित्सा का अभ्यास करने के लिए फिट" के निश्चित रूप से तैयार किया जा सकता है जैसा कि भारत के अलावा अन्य देशों के कई संस्थानों द्वारा उपयोग किया जाता है।

4.	के कारण होने वाली विकलांगता	(ए) क्रोनिक न्यूरोलॉजिकल स्थितियां	(i) मल्टीपल स्केलेरोसिस	40% से कम विकलांगता	40% 80% विकलांगता	80% से अधिक
			(ii) पार्किंसनिज्म			
		(बी) रक्त विकार	(i) हीमोफिलिया	40% से कम विकलांगता	40% 80% विकलांगता	80% से अधिक
			(ii) थैलेसीमिया			
			(iii) सिकल सेल रोग			
5.	बहरा अंधापन सहित एकाधिक विकलांगता		उपर्युक्त निर्दिष्ट विकलांगताओं में से एक से अधिक	उपरोक्त में से किसी की उपस्थिति के संबंध में व्यक्तिगत मामलों में सिफारिशों का निर्णय लेते समय उपरोक्त सभी पर विचार करना चाहिए, अर्थात, दृश्य, सुनाई,आवाज और भाषा विकलांगता, बौद्धिक विकलांगता, और एकाधिक विकलांगता के घटक के रूप में मानसिक बीमारी। भारत सरकार द्वारा जारी संबंधित राजपत्र अधिसूचना द्वारा अधिसूचित फार्मूले का संयोजन एबी (90–ए) 90 (जहां = विकलांगता %का उच्च मान % और बी = विकलांगता % का कम मूल्य जैसा कि विभिन्न विकलांगताओं के लिए गणना की गई है) किसी दिए गए व्यक्ति में एक से अधिक अक्षम करने की स्थिति होने पर उत्पन्न होने वाली विकलांगता की गणना करने के लिए अनुशंसित है। इस सूत्र का उपयोग कई विकलांगों वाले मामलों में किया जा सकता है, और किसी दिए गए व्यक्ति में मौजूद विशिष्ट विकलांगताओं के अनुसार प्रवेश और/या आरक्षण के बारे में सिफारिशें की जा सकती हैं		

नोट: पीडब्ल्यूडी श्रेणी के तहत चयन के लिए, उम्मीदवारों को भारत सरकार के संबंधित प्राधिकरण द्वारा नामित विकलांगता मूल्यांकन बोर्डों में से एक से परामर्श की अपनी निर्धारित तिथि से पहले विकलांगता प्रमाण पत्र प्रस्तुत करना होगा।

अनुलग्नक–1

प्रपत्र 1

[विनियमन 15 ई) (ix) बी)(सी)(डी)देखें]

(कॉलेज का नाम और पता)

आयुर्वेदाचार्य

(आयुर्वेदिक चिकित्सा एवं शल्य चिकित्सा मे – बी.ए.एम.एस प्रोग्राम)

विभाग––––––––––––––––––––––––––

विशिखानुप्रवेश की उपस्थिति और मूल्यांकन का प्रमाण पत्र

प्रशिक्षणार्थी का नाम

विशिखानुप्रवेश के दौरान उपस्थिति

प्रशिक्षण की अवधिः से––––––––––––––––––तक––––––––––––––––––––

(ए) कार्य दिवसों की संख्याः

(बी) भाग लेने वाले दिनों की संख्याः

(सी) अवकाश के दिनों की संख्याः

(डी) अनुपस्थित दिनों की संख्याः

विशिखानुप्रवेश का आकलन

क्रम संख्या	**वर्ग**	**प्राप्तांक**
1	सामान्य	अधिकतम 10
ए	जिम्मेदारी और समय की पाबंदी	(_____) 2 में से
बी	अधीनस्थ, सहकर्मियों और वरिष्ठ अधिकारियों के साथ व्यवहार	(_____) 2 में से
सी	प्रलेखन क्षमता	(_____) 2 में से
डी	चरित्र और आचरण	(_____) 2 में से
ई	अनुसंधान की योग्यता	(_____) 2 में से
2	नैदानिक	अधिकतम 20
ए	विषय के मूल सिद्धांतों में प्रवीणता	(_____) 4 में से
बी	बेडसाइड शिष्टाचार और रोगी के साथ तालमेल	(_____) 4 में से
सी	नैदानिक कौशल और योग्यता के रूप में अधिग्रहित	(_____) 4 में से
I	प्रक्रियाओं को निष्पादित करके	(_____) 4 में से
ii	प्रक्रियाओं में सहायता करके	(_____) 4 में से
iii	प्रक्रियाओं का पालन करके	(_____) 4 में से
प्रक्रियाओं का पालन करके		**(_____)** 30 में से

अंकों का प्रदर्शन ग्रेड

खराब 8, औसत से नीचे 9–14, औसत 15–21, अच्छा 22–25, उत्कृष्ट 26 और ऊपर

नोट एक प्रशिक्षणार्थी प्राप्त असंतोषजनक स्कोर (15 से नीचे) को संबंधित विभाग में पोस्टिंग की कुल अवधि का एक तिहाई दोहराने की आवश्यकता होगी।

दिनांक

स्थान

प्रशिक्षणार्थी का हस्ताक्षर

विभागाध्यक्षका हस्ताक्षर

कार्यालय सील

अनुलग्नक–2

प्रपत्र 2

[विनियमन 15 (ई) (ix) डी]

(कॉलेज का नाम और पता)

आयुर्वेदाचार्य

**(बैचलर ऑफ आयुर्वेदिक मेडिसीन एण्ड सर्जरी –*बी.ए.एम.एस प्रोग्राम*

अनिवार्य परिभ्रामी विशिखानुप्रवेश का प्रमाण पत्र

यह प्रमाणित करने के लिए है कि (प्रशिक्षणार्थी का नाम) प्रशिक्षणार्थी (कॉलेज और पते का नाम), ने निम्नलिखित विभागों में से एक वर्ष की अवधि के लिए (कॉलेज का नाम और पता/पोस्टिंग के स्थान) पर अपनी अनिवार्य परिभ्रामी विशिखानुप्रवेश पूरी कर ली है,_____से_____ तक एक वर्ष की अवधि के लिए,

क्रम संख्या	विभाग का नाम	प्रशिक्षण की अवधि (दिनांक /माह/वर्ष)	प्रशिक्षण की अवधि (दिनांक /माह/वर्ष)

दिनांकः

स्थानः

प्रिंसिपल / डीन / निदशक कार्यालय सील के हस्ताक्षर

अनुलग्नक–3

ए. अकादमिक कैलेंडर का अनंतिम टेम्पलेट

पहला व्यवसायिक बी.ए.एम.एस

(18 माह)

क्रम संख्या	दिनांक/अवधि	शैक्षणिक गतिविधि
1	अक्टूबर का पहला कार्य दिवस	पाठ्यक्रम प्रारंभ
2	15 कार्य दिवस	इंडक्शन कार्यक्रम और संक्रमणकालीन पाठ्यक्रम
3	मार्च का चर्तुथ सप्ताह	पहला आंतरिक मूल्यांकन
4	मई में तीन सप्ताह	ग्रीष्म अवकाश
5	सितंबर का चर्तुथ सप्ताह	दूसरा आंतरिक मूल्यांकन

6	फरवरी के प्रथम और द्वितीय सप्ताह में	पूर्व परिक्षा अवकाश
7	फरवरी के तृतीय सप्ताह से	विश्वविद्यालय परीक्षा
8	अप्रैल का प्रथम कार्य दिवस	द्वितीय व्यावसायिक बी.ए.एम.एस का प्रारंभ।
	नोट.— **1. विश्वविद्यालयों / संस्थानों / कॉलेजों को छात्रों के उस विशेष बैच के अकादमिक कैलेंडर तैयार करते समय तारीखों और वर्ष को निर्दिष्ट करना होगा। उसी को छात्रों को सूचित किया जाना है और संबंधित वेबसाइटों में प्रदर्शित किया जाना है।** **2. चरम मौसम की स्थिति में स्थापित संस्थानों / कॉलेजों शिक्षण के निर्धारित घंटों को बनाए रखने के द्वारा आवश्यक रूप में छुट्टी को समायोजित कर सकते हैं। हालांकि, अकादमिक कैलेंडर की संरचना को नहीं बदला जाएगा।**	

बी. अकादमिक कैलेंडर का अनंतिम टेम्पलेट

दूसरा व्यवसायिक बी.ए.एम.एस

(18 माह)

क्रम संख्या	**दिनांक/अवधि**	**शैक्षणिक** गतिविधि
1	अप्रैल का पहला कार्य दिवस	पाठ्यक्रम प्रारंभ
2	सितंबर का चर्तुथ सप्ताह	पहला आंतरिक मूल्यांकन
3	मार्च का चर्तुथ सप्ताह	दूसरा आंतरिक मूल्यांकन
4	मई में तीन सप्ताह	ग्रीष्म अवकाश
5	अगस्त के प्रथम और द्वितीय सप्ताह में	पूर्व परिक्षा अवकाश
6	अगस्त के तृतीय सप्ताह से	विश्वविद्यालय परीक्षा
7	अक्टूबर का प्रथम कार्य दिवस	तीसरे व्यावसायिक बी.ए.एम.एस का प्रारंभ।
	नोट.— **1.विश्वविद्यालयों / संस्थानों / कॉलेजों को छात्रों के उस विशेष बैच के अकादमिक कैलेंडर तैयार करते समय तारीखों और वर्ष को निर्दिष्ट करना होगा। उसी को छात्रों को सूचित किया जाना है और संबंधित वेबसाइटों में प्रदर्शित किया जाना है।** **2. चरम मौसम की स्थिति में स्थापित संस्थानों / कॉलेजों शिक्षण के निर्धारित घंटों को बनाए रखने के द्वारा आवश्यक रूप में छुट्टी को समायोजित कर सकते हैं। हालांकि, अकादमिक कैलेंडर की संरचना को नहीं बदला जाएगा।**	

सी. अकादमिक कैलेंडर का अनंतिम टेम्पलेट

तीसरा व्यावसायिक बी.ए.एम. एस

(18 माह)

क्रम संख्या	**दिनांक/अवधि**	**शैक्षणिक गतिविधि**
1	अक्टूबर का पहला कार्य दिवस	पाठ्यक्रम प्रारंभ
2	मार्च का चुर्तथ सप्ताह	पहला आंतरिक मूल्यांकन
3	मई में तीन सप्ताह	ग्रीष्म अवकाश
4	सितंबर का चुर्तथ सप्ताह	दूसरा आंतरिक मूल्यांकन
5	फरवरी के प्रथम और द्वितीय सप्ताह में	पूर्व परिक्षा अवकाश

6	फरवरी के तृतीय सप्ताह से	विश्वविद्यालय परीक्षा
7	अप्रैल का प्रथम कार्य दिवस	इंटर्नशिप की शुरुआत
	नोट.– **1.विश्वविद्यालयों / संस्थानों / कॉलेजों को छात्रों के उस विशेष बैच के अकादमिक कैलेंडर तैयार करते समय तारीखों और वर्ष को निर्दिष्ट करना होगा। उसी को छात्रों को सूचित किया जाना है और संबंधित वेबसाइटों में प्रदर्शित किया जाना है।** **2.चरम मौसम की स्थिति में स्थापित संस्थानों / कॉलेजों शिक्षण के निर्धारित घंटों को बनाए रखने के द्वारा आवश्यक रूप में छुट्टी को समायोजित कर सकते हैं। हालांकि, अकादमिक कैलेंडर की संरचना को नहीं बदला जाएगा।**	

अनुलग्नक–4

उपस्थिति रखरखाव के लिए दिशानिर्देश

(सिद्धांत / व्यावहारिक / नैदानिक / गैर व्याख्यान घंटे)

भारतीय चिकित्सा पद्धति में विभिन्न पाठ्यक्रमों में शिक्षा प्रदान करने वाले संस्थानों, कॉलेजों को ऑनलाइन उपस्थिति प्रणाली बनाए रखने की सिफारिश की जाती है। तथापि, यदि विभिन्न शिक्षण/प्रशिक्षण कार्यकलापों की उपस्थिति दर्ज करने के लिए भौतिक रजिस्टरों का रख–रखाव किया जा रहा है, तो निम्नलिखित दिशा–निर्देशों का पालन किया जाना है–

(1) उपस्थिति संचयी क्रमांकन पद्धति में चिह्नित किया जाना है।

(एं) उपस्थिति को 1, 2, 3, 4, 5, 6 के रूप में चिह्नित किया जाना है... इस तरह से ।

(बी) अनुपस्थिति के मामले में, इसे श्एश्के रूप में चिह्नित किया जाना चाहिए ।

(सी) उदाहरणः पी पी ए पी ए पी (1, 2, 3, 4, ए, 5, 6,ए, ए, 7, 8, 9...) के रूप में चिह्नित किया जा सकता है।

(2) उपस्थिति के लिए 'पी' को सख्ती से चिह्नित करने से बचें।

(3) सिद्धांत और व्यावहारिक/नैदानिक/गैर–व्याख्यान गतिविधियों के लिए अलग–अलग रजिस्टर बनाए रखा जाना है।

(4) अवधि या पाठ्यक्रम या पाठ्यक्रम के हिस्से के अंत में, अंतिम संख्या को कुल उपस्थिति के रूप में लिया जाना है।

(5) छात्रों के हस्ताक्षर के बाद कुल उपस्थिति को संबंधित एचओडी द्वारा प्रमाणित किया जाना है और उसके बाद प्रिंसिपल द्वारा अनुमोदन किया जाएगा।

(6) कई टर्म्स के मामले में, पाठ्यक्रम के अंत में सभी टर्म्स की उपस्थिति को संक्षेप में प्रस्तुत किया जाना है और नैदानिक और गैर–व्याख्यान घंटों सहित सिद्धांत और व्यावहारिक के लिए प्रतिशत की गणना अलग से की जानी है।

[नोटः *यदि हिंदी और अंग्रेजी संस्करण के बीच कोई विसंगति है, तो अंग्रेजी संस्करण को अंतिम माना जाएगा।]

THE NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE

NOTIFICATION

New Delhi, the 16th Feburary, 2022

F. No. BOA/Regulation/UG/7-10/2021.—In exercise of the powers conferred by sub-section (2) of section 55 of the **National Commission for Indian System of Medicine Act, 2020 (14 of 2020)**, and in supersession of the Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulation, 1986 except as respects thing done or omitted to be done before such supersession, the Commission hereby makes the following regulations, namely:-

1 Short title and commencement.-(1)These regulations may be called **National Commission for Indian System of Medicine (Minimum Standards of Undergraduate Ayurveda Education) Regulations-2022.**

(2) They shall come into force on the date of their publication in the Official Gazette.

2 Definitions.- (1) In these regulations, unless the context otherwise requires,-

(i) "Act" means the National Commission for Indian System of Medicine, Act, 2020 (14 of 2020);

(ii) "Annexure" means an annexure appended to these regulations;

(iii) "Appendix" means an appendix appended to these regulations.

(2) The words and expressions used herein and not defined but defined in the Act shall have the same meanings as respectively assigned to them in the Act.

3 Bachelor of Ayurvedic Medicine And Surgery programme.- The Bachelor of Ayurveda education namely, the Bachelor of Ayurvedic Medicine and Surgery (B.A.M.S.) shall produce Graduates, having profound knowledge of Ashtanga Ayurveda along with the contemporary advances in the field of Ayurveda supplemented with knowledge of scientific and technological advances in modern science and technology along with extensive practical training, as an efficient physicians and surgeons for the health care services.

4 Ashtanga Ayurveda.- (a)Ashtanga Ayurveda means eight clinical specialties of ayurveda viz., Kayachikitsa (General/Internal Medicine), Shalya Tantra (Surgery), Shalakya Tantra (Ophthalmology, Oto-Rhino-Laryngology and Oro-Dentistry), Kaumarabhritya (Obstetrics and Paediatrics), Agada Tantra (Clinical Toxicology), Bhuta Vidya (Clinical Microbiology, Clinical Psychology and Psychiatry), Rasayana (Preventive, Promotive, Rejuvenative Medicine and Gerentology) and Vajikarana (Reproductive Medicine and Epigenetics).

(b) All the eight specialties referred to in clause (a) were developed to deal all sort of clinical problems of respective specialty i.e., in general their etiopathogenesis including clinical anatomy, physiology; causative factors in terms of physical, psychological, external (injury, microbes, natural calamities etc.), dietic factors, faulty lifestyles, genetic causes (congenital, hereditary) etc.; clinical manifestation, examination/analysis of biological fluids / secretions/ excretions; various diagnostic tools including scopy (naadiyantra), diagnostic criteria, prognostication, principles of management in terms preventive, promotive, curative, palliative and rehabilitative management including surgical; pharmaco-therapeutics as well as pharmaceutics of related drugs and formulations, relevant therapeutic procedures including physiotherapy techniques such as bandhana, vesthana etc., their methods of administration, complications and management, diet and lifestyleregimen; methods of assessment of improvement/cure, causes of recurrence etc. in relation to that particular clinical condition.

(c) The specialties referred to in clause (a) also deals with instruments/equipment that are required for administration of various therapeutic procedures/surgeries and other procedures, their methods of usage and maintenance. Hospital architecture, landscaping, air-conditioning and human resource management, qualities of nursing staff including ideal patient qualities.

(d) Student selection process for medical education, methods of study of medical science, teaching methods including training of clinical skills on models, code of conduct for students, medical practitioners as well as teachers, student assessment methods, award of degrees, oath administration, medical registration etc.

5 Eligibility criteria for admission.- (1)The eligibility to seek admission in Bachelor of Ayurveda education shall be as under,-

(a) The candidate shall have passed 10+2 or its equivalent examination from any recognised Board with Physics, Chemistry, Biology and have obtained minimum of fifty per cent. marks taken together in Physics, Chemistry and Biology in the case of general category and forty per cent. marks in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes:

Provided that in respect of persons with disability candidate specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum qualifying marks in the said examinations shall be forty-five per cent. in the case of General category and forty per cent. in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes.

(b) No candidate shall be admitted to B.A.M.S Degree programme unless the candidate attained the age of seventeen years on or before the 31st December of the year of admission in the first year of the programme and not more than twenty-five years on the 31st December of the year of admission in the first year of the programme:

Provided that, the upper age-limit may be relaxed by five years in the case of Scheduled Castes, Scheduled Tribes, Other Backward Classes and disabled candidates.

(2) National Eligibility-cum-Entrance Test.-(i)There shall be a uniform entrance examination for all medical institutions at the under-graduate level, namely the National Eligibility-cum- Entrance Test (NEET) for admission to under-graduate programme in each academic year and shall be conducted by an authority designated by the National Commission for Indian System of Medicine.

(ii) In order to consider for admission to under-graduate programme for an academic year, it shall be necessary for a candidate to obtain minimum of marks at 50th percentile in the National Eligibility-cum- Entrance Test for under-graduate programme held for the said academic year:

Provided that in respect of,-

(i) candidates belonging to the Scheduled Castes, Scheduled Tribes and Other Backward Classes, the minimum marks shall at 40th percentile;

(ii) candidates with specified disabilities under the Rights of Persons with Disabilities Act, 2016 (49 of 2016) the minimum marks shall be at 45th percentile in the case of general category and 40th percentile in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes:

Provided further that where sufficient number of candidates in the respective category fail to secure minimum marks in the National Eligibility - cum - Entrance Test held for any academic year for admission to undergraduate programme, the National Commission for Indian System of Medicine in consultation with the Central Government may at its discretion lower the minimum marks required for admission to undergraduate programme for candidates belonging to respective category and marks so lowered by the Central Government shall be applicable for that academic year only.

(3) An All-India common merit list as well as State-wise merit list of the eligible candidates shall be prepared on the basis of the marks obtained in the National Eligibility-cum-Entrance Test and the

candidates, within the respective category shall be considered for admission to under-graduate programme from the said merit lists only.

(4) The seat matrix for admission in the Government, Government-aided Institution and Private Institution shall be fifteen per cent. for All-India Quota and eighty-five per cent. for the State and Union territory quota:

Provided that,-

(i) the All-India Quota for the purpose of admission in all the deemed university both Government and private shall be hundred per cent.;

(ii) the university and institute which are already having more than fifteen per cent. All-India Quota seats shall continue to maintain that quota;

(iii) five per cent. of the annual sanctioned intake capacity in Government and Government-aided Institution shall be filled up by candidate with specified disability in accordance with the provisions of the Rights of Persons with Disabilities Act, 2016 (49 of 2016) and based on the merit list of National Eligibility -cum-Entrance Test.

Explanation.- For the purpose of this clause, the specified disability contained in the Schedule to the Rights of Persons with Disabilities Act, 2016 (49 of 2016) specified in ***Appendix "A"*** and the eligibility of candidate to pursue a programme in Indian Systems of Medicine with specified disability shall be in accordance with the guidelines specified in ***Appendix "B"*** and if the seats reserved for the persons with disabilities in a particular category remain unfilled on account of unavailability of candidates, the seats shall be included in the annual sanctioned seats for the respective category.

(5) (i) The designated authority for counseling of State and Union territory quota for admissions to undergraduate programme in all Ayurveda Educational Institutions in the States and Union territories including institutions established by the State Government, University, Trust, Society, Minority Institution, Corporation or Company shall be the respective State or Union Territory in accordance with the relevant rules and regulations of the concerned State or Union territory, as the case may be.

(ii) The counseling for all admission to Bachelor of Ayurvedic Medicine and Surgery Programme for hundred percent seats of all Deemed Universities both Government and Private shall be conducted by the authority designated by the Central Government in this behalf.

(6) The counselling for admission to Bachelor of Ayurvedic Medicine and Surgery Programme for seat under All-India Quota as well as for all Ayurveda Educational Institutions established by the Central Government shall be conducted by the authority designated by the Central Government in this behalf.

(7) (i) All seats irrespective of category (Central quota, State Quota or management etc.) except foreign nationals are to be admitted through counselling (Central, State or UT) only. Direct admission by any means other than above specified shall not be approved.

(ii) The institutions shall have to submit the list of students admitted in the format specified by NCISM on or before 6 pm on the cut off date for admissions specified by NCISM time to time for verification.

(iii) Universities shall approve the admission of those candidates (except foreign nationals) who have been allotted through counselling (Central, State or UT as the case may be)

(8) No candidate who has failed to obtain the minimum eligibility marks under this regulation shall be admitted to under-graduate programme in the said academic year.

(9) No authority or institution shall admit any candidate to the under-graduate programme in contravention of the criteria or procedure laid down in these regulations in respect of admission and any admission made in contravention of the said criteria or procedure shall be cancelled by the National Commission for Indian System of Medicine forthwith.

(10) The authority or institution which grants admission to any student in contravention of the criteria or procedure laid down in these regulations shall be liable accordingly, under the relevant provisions of the Act.

(11) For foreign national candidate, any other equivalent qualification approved by the Central Government may be allowed and sub-regulation (2) of regulation 5 shall not be applicable.

6 Duration of B.A.M.S. programme.- The duration of the B.A.M.S. Programme shall be five years and six months as per the following table, namely:-

Table-1

(Duration of B.A.M.S. Programme)

Sl. No.	Course of the B.A.M.S. Programme	Duration
(a)	First Professional B.A.M.S.	Eighteen Months
(b)	Second Professional B.A.M.S.	Eighteen Months
(c)	Third (Final) Professional B.A.M.S.	Eighteen Months
(d)	Compulsory Rotatory Internship	Twelve Months

7 Degree to be awarded.-The candidate shall be awarded Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery-B.A.M.S) Degree after passing all the examinations and completion of the laid down programme of study extending over the laid down period and the compulsory rotatory internship extending over twelve months and the nomenclature of degree shall be **Ayurvedacharya (Bachelor of Ayurvedic Medicine and Surgery -B.A.M.S)**.

8 Medium of instruction.- The medium of instruction for the programme shall be Sanskrit or Hindi or any recognised regional language or English:

Provided that in case, if any institute is admitting students from different states or international students, the medium of instruction shall be English.

9 Pattern of study.- (1) The B.A.M.S. Programme shall consist of **Main Programme and Electives** and the pattern of study shall be followed in the following manner, namely:-

(A) (i) (a) After admission, the student shall be inducted to the B.A.M.S. Programme through an Induction Programme not less than fifteen working days based on the Transitional Curriculum which intends to introduce newly admitted student to Ayurveda system of medicine and to make him well aware of the B.A.M.S. Programme he is going to study for next four and a half years.

(b) During the induction programme, the student of Ayurveda shall learn basic of Sanskrit for Ayurveda and basic life support and first aid along with other subject as laid down in the syllabus.

(c) There shall be fifteen days induction programme which shall be not less than ninety hours and every day may consist of six hours.

(ii) Total working days for each professional session shall be not less than three hundred and twenty days.

(iii) (a) Total working days for the First Professional session shall be not less than three hundred and five days except for fifteen days for the induction programme.

(b) total teaching hours for First Professional session shall not be less than 1920.

(iv) Total teaching hours for Second Professional session shall be not less than 2240 and the proportion of teaching hours in Lecture to Non-lecture shall be 1:2.

(v) Total teaching hours for Third (Final) Professional session shall not be less than 2240 and during the Third (Final) Professional Session, three hours of clinical classes at Hospital during morning hours shall be conducted and the proportion of teaching hours in Lecture to Non-Lecture hour shall be 1:2.

(vi) Working hours may be increased by the University or institution as per requirement to complete the stipulated period of teaching and requisite activity.

Explanation.- For the purposes of this regulation the expression "**Lectures**" means Didactic teaching i.e., classroom teaching and the expression "**Non-lectures**" includes Practical / Clinical and Demonstrative teaching and the Demonstrative teaching includes Small group teaching / Tutorials /Seminars / Symposiums / Assignments / Role play / Pharmacy training / Laboratory training / Dissection / Field visits / Skill lab training / Integrated learning / Problem based learning / Case based learning / Early clinical exposure / Evidence based learning etc. as per the requirement of the subject and in Non-lectures, the Clinical / Practical part shall be seventy per cent. and Demonstrative teaching shall be thirty per cent.

(vii) There shall be minimum of one hour each for library and physical education per week and one hour of recreation (expression of talent and extra-curricular activities) per month has to be allotted in the regular time table of all batches.

(B) The First Professional session shall ordinarily start in the month of October and the following subjects shall be taught as per the syllabus laid down by the National Commission for Indian System of Medicine from time to time, namely:-

Table-2

(Subjects for First Professional B.A.M.S.)

Sl.No.	Subject Code	Subject	Equivalent Terms
1	AyUG-SN and AI	Samskritam evam Ayurved Ithihas	Sanskrit and History of Ayurveda
2	AyUG-PV	PadarthaVigyan	Fundamental Principles of Ayurveda and Quantum Mechanics
3	AyUG-KS	Kriya Sharira	Human Physiology
4	AyUG-RS	Rachana Sharira	Human Anatomy
5	AyUG-SA1	Samhita Adhyayan-1	Study of Ayurveda Classical Text
6	Electives (Minimum Three) subjects		

(C) The Second Professional session shall ordinarily start in the month of April after completion of First Professional examination and the following subjects shall be taught as per the syllabus laid down by the National Commission for Indian System of Medicine from time to time, namely:-

Table-3

(Subjects for Second Professional B.A.M.S.)

Sl.No.	Subject Code	Subject	Equivalent Terms
1	AyUG-DG	Dravyaguna Vigyan	Pharmacology and Materia Medica- Herbal
2	AyUG-RB	Rasashastra evam Bhaishajyakalpana	Materia Medica- Minerals & Metals and Pharmaceutical Science
3	AyUG-RN	Roga Nidan evam Vikriti Vigyan	Methods of Diagnosis, Diagnostic Procedures and Pathology
4	AyUG-AT	Agad Tantra evam Vidhi	Clinical Toxicology and Medical Jurisprudence

		Vaidyaka	
5	AyUG-SA2	Samhita Adhyayan-2	Study of Ayurveda Classical Text
6	AyUG-SW	Swasthavritta evam Yoga	Lifestyle Management, Public Health and yoga
7	Elective (Minimum Three) Subjects		

(D) The Third (Final) Professional session shall ordinarily start in the month of October after completion of Second Professional examination and the following subjects shall be taught as per the syllabus laid down by the National Commission for Indian System of Medicine from time to time, namely:-

Table-4

(Subjects for Third (Final) Professional B.A.M.S.)

Sl.No.	Subject Code	Subject	Equivalent Terms
1	AyUG-KC	Kayachikitsa including Manasa Roga, Rasayana and Vajikarana	Internal Medicine including Psychiatry, Rejuvenative Medicine, Reproductive Medicine and Epigenetics
2	AyUG-PK	Panchakarma & Upakarma	Therapeutic Procedural Management
3	AyUG-ST	Shalya Tantra	General Surgery
4	AyUG-SL	Shalakya Tantra	Ophthalmology, Oto-Rhino-Laryngology & Oro-Dentistry
5	AyUG-PS	Prasuti Tantra evam Stree Roga	Gynecology and Obstetrics
6	AyUG-KB	Kaumarabhritya	Pediatrics
7	AyUG-SA3	Samhita Adhyayan-3	Study of Ayurveda Classical Text
8	AyUG-EM	Atyaikachikitsa	Emergency Medicine
9	AyUG-RM	Research Methodology and Medical-statistics	
10	Elective (Minimum Three) Subjects		

(E) University, Institution and College shall prepare Academic Calendar of that particular batch in accordance with the template of tentative Academic Calendar provided in these regulations in ***Annexure-iii***and the same shall be circulated to students and hosted in respective websites and followed accordingly.

(F) The B.A.M.S. programme shall consist of following Departments and subjects, namely:-

Table-5

(Departments and Subjects)

Sl.No.	Department	Subjects
01	Samhita Siddhanta & Sanskrit	Samskritam
		Ayurved Ithihas
		Padartha Vigyan
		Samhita Adhyayan-1, 2, 3
02	Rachana Sharira	Rachana Sharira
03	Kriya Sharira	Kriya Sharira
04	Dravyaguna	Dravyaguna Vigyan
05	Rasashastra & Bhaishajyakalpana	Rasashastra evam Bhaishjyakalpana
06	Roga Nidan & Vikriti Vigyan	Roga Nidan evam Vikriti Vigyan
07	Agada Tantra	Agada Tantra evam Vidhi Vaidyaka
08	Swasthavritta &Yoga	Swasthavritta evam Yoga
		Research Methodology & Medical Statistics

09	Kayachikitsa	Kayachikitsa including Manasa Roga, Rasayana evam Vajikarana
		Atyaikachikitsa
10	Panchakarma	Panchakarma evam Upakarma
11	Shalya Tantra	Shalya Tantra
12	Shalakya Tantra	Shalakya Tantra
13	Prasuti Tantra & Stree Roga	Prasuti Tantra evam Stree Roga
14	Kaumarabhritya	Kaumarabhritya

(G) **Electives.-**(i) Electives are introduced in B.A.M.S. curriculum to provide opportunity to student of Ayurveda to get introduced, exposed and oriented to various allied subjects that are required to understand and build inter-disciplinary approach.

(ii) The electives shall be conducted as online programme.

(iii) Each elective subject shall be of forty-five hours duration and divided in five modules and each module shall have nine hours i.e., five hours of teaching, two hours of guided learning, one hour each for expert interaction/reflection and assessment and in total, each elective will have twenty-five hours of teaching, ten hours of guided learning, five hours of expert interaction/reflection and five hours of assessment (five assessments of one hour each).

Explanation.- For the purpose of this regulation, Teaching means video lectures, Power point presentations, audio lectures, video clippings, audio clippings, technical images, study material etc.

(iv) The study hours for electives are over and above the prescribed teaching hours of B.A.M.S. under these regulations.

(H) **Clinical training.-** (i)Clinical training of the student shall start from the First Professional session onwards and subject related clinical training shall be provided in the attached hospital by the concerned faculty and department in non-lecture hours as per the requirement of the subject as under-

(a) During first professional session, clinical training shall be provided by department of Samhita & Siddhanta and Kriya Sharira through the specialty Outpatient Department (OPD) and Inpatient Department (IPD) where in teachers of the above departments are consultants and screening OPD; wherein students involve in Prakriti and Saara assessment, practicing of naadi, recording of dosha vriddhi kshaya lakshanas, measurement of height, weight, calculation of Body Mass Index (BMI) etc. activities.

(ii) (a) Clinical training for the Second Professional session shall be as per clause A (iv) of sub-regulation (1) of regulation 9 and clinical attendance shall be maintained by the concerned faculty and department.

(b) Clinical training for the Second Professional session shall be provided in accordance with the requirement of subjects as under-

(A) i. Department of Roganidana will provide clinical training through specialty clinics and IPD wherein teachers of Roganidana department are consultants.

ii. Department of Agada Tantra through Visha Chikitsa OPD and IPD.

iii. Department of Swasthavritta through swastha rakshna OPD and IPD.

(B) In addition, the second professional B.A.M.S. students shall be posted to medicine dispensary to get familiar with prescription patterns, medicine names, forms, dosage, Aushada sevanakaala, anupana, sahapana, method of mixing or compounding of medicines etc. Similarly, in IPD nutritional assessment, pathya preparation unit or diet center to get familiarize with various pathya or therapeutic diet preparations.

(iii) The clinical training(OPD and IPD/Operation Theatre/Labour room/Pancha Karma therapy room) during the third (Final) Professional session as mentioned under clause A (v) of

sub-regulation (1) of regulation 9 shall be on rotation basis as per the non-lecture/clinical batches and in accordance with the clinical/non-lecture teaching hours stipulated for the following subjects, namely:-

(a) Kayachikitsa: OPD, IPD and specialty clinics functioning under the department if any;

(b) Panchakarma: OPD, IPD, Panchakarma therapy rooms including preparation room and any other related specialty units or clinics if any;

(c) ShalyaTantra: OPD, IPD, operation theater (major and minor), any specialty units like sports medicine, marmachikitsa, bhagnachikitsa etc.;

(d) ShalakyaTantra: Eye, ENT, dental clinic, kriyakalpa and any other related specialty clinics if any;

(e) Streeroga evam Prasuti: OPD, IPD, labour room, procedural room (yoni dhavana, yoni dhupana, yoni pichu, uttarabasti etc.), garbha samskara, and other related specialty clinics if any;

(f) Kaumarabhitya: OPD, IPD, pediatric panchakarma rooms and other related specialty clinics if any; and

(g) Samhita & Siddhanta: Specialty clinics/units like madhumeha, hridroga, medoroga, sthoulya, asthi & sandhi etc.

(v) Teaching staff belonging to the departments other than Kayachikitsa, panchakarma, Shalya Tantra, Shalakya Tantra, Streeroga Evam Prasuti Tantra, Kaumarabhritya, Agada Tantra (Visha Chikitsa) and Swasthavritta & Yoga can involve in clinical activities in the attached teaching hospital and can provide clinical training to students through Specialty clinics/units. Such specialty clinics shall function under any one of the above departments viz. Kayachikitsa, Panchakarma, Shalya Tantra, Shalakya Tantra, Streeroga Evam Prasuti Tantra, Kaumarabhritya, Agada Tantra (Visha Chikitsa) and Swasthavritta & Yoga. The specialty clinics may be established by teachers having expertise either by Post-graduate dissertation, PhD thesis or by training or exposure. There shall not be any OPD by names Rachana, Kriya, Basic Principles, Dravyaguna, Rasashastra and Roga Nidana.

10 Methodology for supplementing modern advances, scientific and technological development in Indian System of Medicine (SMASTD-ISM).-

(1) To accomplish the requirement under subsection (h) of section 2 of National Commission for Indian System of Medicine Act 2020 regarding, supplementation of modern advances, scientific and technological developments in Indian System of Medicine (SMASTD-ISM), all the fourteen departments as mentioned in clause (F) of sub-regulation (1) of regulation 9, shall be treated as fourteen verticals in addition there shall be two more verticals one each for education and research and each vertical shall be supplemented, enriched and updated with relevant and appropriate advances and developments in the area of diagnostic tools, conceptual advancements and emerging areas as under-

(i) Innovations or advances or new developments in Basic Sciences like biology, chemistry, physics, mathematics, microbiology, bioinformatics, molecular biology etc.;

(ii) Diagnostic Advancements;

(iii) Therapeutic Technology;

(iv) Surgical Technique or Technology;

(v) Pharmaceutical Technology including quality and standardization of drugs, drug development etc.;

(vi) Teaching, Training Methods and Technology;

(vii) Research Methods, Parameters, Equipment and Scales etc.

(viii) Technological advancements, Automation, Software, Artificial Intelligence, Digitalization, Documentation etc.;

(ix) Biomedical Advancements;

(x) Medical equipments;

(xi) any other innovations, advances, technologies and developments that are useful for understanding, validating, teaching, investigations, diagnosis, treatment, prognosis, documentation, standardization and conduction of research in Ayurveda.

(2) There shall be multidisciplinary core committee constituted by National Commission for Indian System of Medicine for the purpose of supplementation of modern advances, scientific and technological developments in Indian System of Medicine, that identify the advances and developments that are suitable and appropriate to include in any one or multiple verticals.

(3) There shall be an expert committee for each verticalconstituted by Board of Ayurveda, to define and suggest the method of adaptation and incorporation of the said advances and developments and also specify the inclusion of the same at under-graduate or post-graduate level and the expert committee shall develop detailed methodology for usage, standard operating procedure and interpretation as required.

(4) Any teaching staff, practitioner, researchers, students and innovators etc. may send their suggestions through a portal specified by National Commission for Indian System of Medicine regarding supplementation of modern advances, scientific and technological developments in Indian System of Medicine and such suggestions shall be placed before core committee for consideration.

(5) The modern advances shall be incorporated with due interpretation of the said advances based on the principles of Ayurveda supported by the studies and after five years of inclusion of such advances in syllabus, they shall be considered as part of Ayurveda and will be defined/described in Ayurvedic terminology.

(6) Once core committee approves the recommendations of the expert committee, National Commission for Indian System of Medicine shall direct the Board of Ayurveda, to include the same in curriculum of under-graduate or post-graduate as specified by expert committee and the commission shall issue guidelines or if required conduct orientation of teachers for incorporation of the recommended modern advancement or scientific and technological development.

(7) The proportion of modern advances with that of Ayurveda teaching content-shall not exceed 40 per cent.

(8) Composition of the Committees for SMASTD-ISM.- There shall be a Core Committee and an Expert Committee for each vertical and the composition of such committees shall be as under-

(a) Composition of SMASTD-ISM Core Committee (Ayurveda):

The SMASTD-ISM shall be eleven-member committee comprises of,-

(i) President, Board of Ayurveda – Chairman;

(ii) two experts from Ayurveda (one expert from Samhita & Siddhanta) – members;

(iii) one expert (either retired or in service) each from CSIR, CCRAS, ICMR, DBT, Technocrat, Biomedical Engineering – member;

(iv) one Educational Technologist – member;

(v) member of Board of Ayurveda - Member Secretary.

Provided that the core committee can co-opt any expert as per the specific needs with due permission of the Chairman, National Commission for Indian System of Medicine.

Terms of Reference.- (i) The term of the committee shall be three years from the date of its constitution.

(ii) The committee shall meet at least twice in a year.

(iii) The committee shall identify any modern advances, scientific and technical developments as listed above that are relevant and applicable to Ayurveda either to,-

(A) understand, validate, or for conduction of research activities in Ayurveda;

(B) useful for diagnosis or prognostication of a specific clinical condition and treatment;

(C) useful for teaching and training;

(D) useful for health care services through Ayurveda.

(iv) The committee shall ensure the applicability of the identified modern advancement or scientific and technical development to basic principles of Ayurveda with the help of the two expert members of Ayurveda.

(vi) To identify and recommend suitable experts for the Expert Committee to develop methodology for identification of modern advance or development.

(vi) To suggest the application of the advances or developments in terms of its usage in specific vertical or to incorporate in under-graduate or post-graduate syllabus etc. as the case may be.

(vii)As the modern science and technology is ever changing, the core committee shall identify the outdated part of the modern science and technology and suggest National Commission for Indian System of Medicine to replace it with the appropriate modern advances.

(b) Composition of Expert Committee (Ayurveda).-

The Expert Committee shall be constituted by Board of Ayurveda comprises of five members as under-

(i) Subject Expert as decided by Board of Ayurveda – Chairman;

(ii) two experts from relevant Ayurveda subjects – members;

(iii) one expert from relevant modern subject – member;

(iv) one expert from teaching technology – member.

Provided that the Expert Committee can co-opt concerned expert in accordance to the selected area with the permission of President, Board of Ayurveda.

Terms of Reference.- (i) The term of the committee shall be three years from the date of its constitution.

(ii) The committee shall meet as many times as per the direction of the President Board of Ayurveda (BOA).

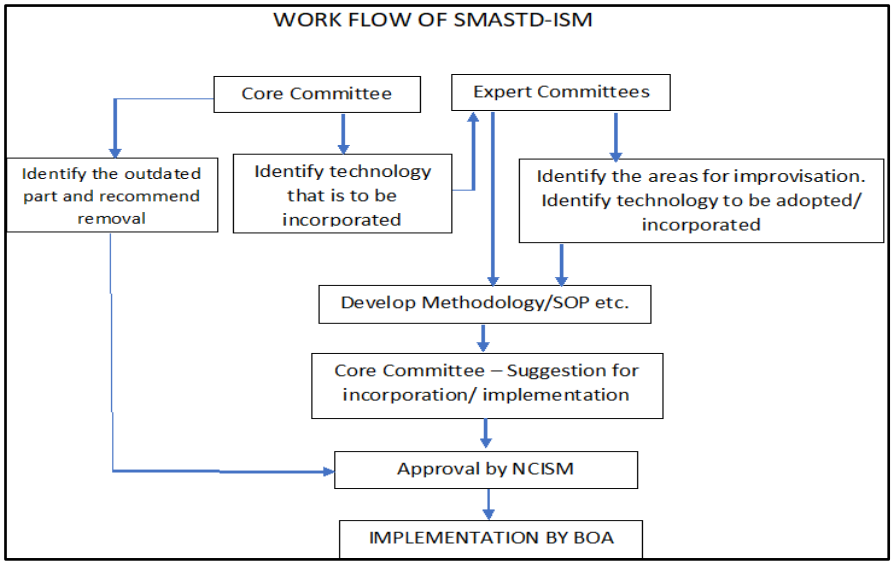
(iii) The committee shall work on the suggestion from the core committee and decide how to incorporate it in the syllabus, its mode of teaching (i.e., lecture/non-lecture) and the assessment with the help of educational technologist.

(iv) The committee shall first understand the application of modern advances that are identified to incorporate and its relevance to the basic principles of Ayurveda.

(v) The committee shall also identify the need of advance technology in Ayurveda particular to that vertical and identify the suitable technology and recommends its usage along with standard operating procedure or methodology.

(vi) The committee shall suggest core committee regarding the modern advances and technology to be included at under-graduate or post-graduate level.

(vii) The work flow of the SMASTD-ISM shall be as under -



11 Examination.- (a) (i)The First Professional examination shall ordinarily be held and completed by the end of First professional session;

(ii) the student who failed in one or two subjects of First Professional shall be allowed to keep terms of the Second Professional session and to appear in Second Professional examination;

(iii) the student who failed in more than two subjects shall not be allowed to keep term in Second Professional session and the subsequent supplementary examination of First Professional shall be held at every six months.

(b) (i) The Second Professional examination shall ordinarily be held and completed by the end of Second Professional session;

(ii) the student who failed in one or two subjects of Second Professional shall be allowed to keep the term of the Third (Final) Professional session;

(iii) the student who failed in more than two subjects shall not be allowed to keep term in Third (Final) Professional session and the subsequent supplementary examinations of Second Professional shall be held every six months.

(c) (i) The Third (Final) Professional examination shall ordinarily be held and completed by the end of Third (Final) Professional session.

(ii) Before appearing for Third (Final) Professional examination the students shall have to pass all the subjects of first and second professional and shall qualify nine electives.

(iii) The subsequent supplementary examination of Third (Final) professional will be held at every six months.

(d) There shall be no separate class for odd batch student (those students who could not keep the term) and the student has to attend the class along with regular batch or with junior batch as applicable.

(e) To become eligible for joining the Compulsory Rotatory Internship programme, all three professional examinations shall be passed and qualified in nine electives within a period of maximum ten years from the date of admission.

(f) The theory examination shall have twenty per cent. marks for Multiple Choice Questions (MCQ), forty per cent. marks for Short Answer Questions (SAQ) and forty per cent. marks for Long Explanatory Answer Questions (LAQ) and these questions shall cover the entire syllabus of the subject.

(g) The minimum marks required for passing the examination shall be fifty per cent. intheorycomponent and fifty percent in practicalcomponent (that include practical, clinical, viva-voce, internal assessment and electives wherever applicable) separately in each subject.

(h) **Evaluation of Electives.-** Electives shall be evaluated in terms of attendance and assessment and on the basis of evaluation, the student shall be awarded credits as well as grades as under-

(i) one credit shall be awarded for attending minimum five hours of a modular programme and a student can earn maximum five credits for each elective;

(ii) Assessment shall be conducted at the end of each module and average of five modular assessments shall be considered for grading i.e., up to 25 per cent. Bronze; 26-50 per cent. Silver; 51-75 per cent. Gold; 76 per cent. and above Platinum.

(iii) The structure of elective shall be as per the following table, namely:-

Table - 6

(Structure of Elective)

<table>
<tr><td colspan="6">Each Elective: Five Modules of Nine Hours Each (5*9=45)</td></tr>
<tr><td rowspan="2">Sl.No.</td><td rowspan="2">Component</td><td colspan="2">Duration (Hours)</td><td>Credits</td><td>Grades</td></tr>
<tr><td>Module</td><td>Elective</td><td rowspan="5">One Credit for attending minimum of five hours of each modular programme. Maximum five credits</td><td rowspan="5">Grade is awarded on the basis of average of all five modular assessments.
Bronze: <25 per cent.
Silver: 26-50 per cent.
Gold: 51-75 per cent.
Platinum: 76 per cent. & above.</td></tr>
<tr><td>1</td><td>Teaching</td><td>5</td><td>25</td></tr>
<tr><td>2</td><td>Guided Learning</td><td>2</td><td>10</td></tr>
<tr><td>3</td><td>Expert Interaction/ Reflection</td><td>1</td><td>5</td></tr>
<tr><td>4</td><td>Assessment</td><td>1</td><td>5</td></tr>
</table>

(iv) (a) Student shall have to qualify (obtaining any grade) minimum of three elective subjects for each professional session.

(b) List of elective subjects shall be made available under three sets (A, B and C) for each professional session i.e., sets FA, FB and FC for first professional B.A.M.S.; sets SA, SB and SC for second professional B.A.M.S.; sets TA, TB and TC for third professional B.A.M.S.

(c) Student may opt any one elective as per their choice from each set specified for respective professional B.A.M.S.

(d) Weightage of two marks for each credit and maximum of ten marks shall be awarded for each elective.

(e) These elective marks shall be added to the viva-voce marks of respective subjects as specified in these regulations.

(f) Apart from three mandatory electives for each profession, students have freedom to choose and qualify as many numbers of additional electives as per their interest.

(g) Marks weightage shall be only for three electives per professional session i.e., one elective subject from each set of respective professional session.

(h) A separate online certificate shall be generated for each elective mentioning credits earned and grades obtained.

(v) The examination branch of the institution shall compile the marks of electives obtained by students as specified above and submit to university through the Head of the Institution so that the university shall add the same in viva-voce of respective subjects as shown in ***Tables 11, 13 & 15.***

(i) (i) A candidate obtaining sixty-five per cent. and above marks shall be awarded first class in the subject and seventy–five percent and above marks shall be awarded distinction in the subject.

(ii) The award of class and distinction shall not be applicable for supplementary examinations.

(j) (i) Each student shall be required to maintain minimum seventy-five percent attendance in each subject in theory (i.e., lecture hours) practicaland clinicals (i.e., non-lecture hours) separately for appearing in examination.

(iii) Where the institute maintains physical attendance register, it shall be recorded in cumulative numbering method as per ***Annexure-iv***and at end of the course/term/ part of the course, after obtaining each student signature the same is to be certified by respective Head of the Department and approved by Head of the Institute.

(iv) The approved attendance shall be forwarded to university.

(k) If a student fails to appear in regular examination for cognitive reasons, he may appear in supplementary examination as regular student and his non-appearance in regular examination shall not be treated as an attempt.

(l) Notwithstanding anything contained in these regulations,-

(i) Clause 11(e) shall be applicable to the student who admitted under Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulations, 1986, except electives and as per section 3 of SCHEDULE I (as amended vide notification no. 24-14/2016 (U.G. Regulation) Regulations, 2016) with 4 professionals.

(ii) Student who got admitted under Indian Medicine Central Council (Minimum Standards of Education in Indian Medicine) Regulations, 1986, the maximum number of chances and maximum period of years to pass respective professional examination as laid down under the clauses 6(1)(c), 2(¢), 3(c), 4(d), and 4(e) of SCHEDULEI (as amended vide notification no. 24-14/2016 (U.G. Regulation) Regulations, 2016) shall not be applicable.

12 Assessment.-Assessment of students shall be in the form of Formative and Summative Assessments as under-

(a) **Formative Assessment.-** Students shall be assessed periodically to assess their performance in the class, determine the understanding of programme material and their learning outcome in the following manner, namely:-

(i) Periodical Assessment shall be carried out at the end of teaching of a topic or module or a particular portion of syllabus and the evaluation methods as per the following table may be adopted as suits to the content, namely:

Table-7

Sl. No.	Evaluation Method
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)

3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project;

(Evaluation methods for periodical assessment)

(ii) (a) internal evaluation shall be conducted by the College and Institute at the end of six months (First Term Test) for thirty per cent. of the syllabus and at twelve months (Second Term Test) for forty per cent. new part of the syllabus.

(b) The remaining thirty per cent. of syllabus shall be completed in the last six months (Third Term) before university examination;

(iii) there shall be minimum three periodical assessments for each subject before First Term Test (ordinarily at 6^{th} month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12^{th} month of respective professional B.A.M.S.) and minimum of three periodical assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

(iv) the scheme and calculation of assessment shall be as per the following tables, namely:-

Table-8

[Scheme of Assessment (Formative and Summative)]

Sl.No.	Professional Course	Duration of Professional Course		
		First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)
1	First Professional B.A.M.S.	3 PA and First TT	3 PA and Second TT	3 PA and UE
2	Second Professional B.A.M.S.	3 PA and First TT	3 PA and Second TT	3 PA and UE
3	Third Professional B.A.M.S.	3 PA and First TT	3 PA and Second TT	3 PA and UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

Table - 9

(Example for Internal Assessment for the subject having 30 marks)

Term	Periodical Assessment					Term Test	Term Assessment	
	A	B	C	D	E	F	G	H
	1 (15)	2 (15)	3 (15)	Average (A+B+C/3)	Converted to 30 (D/45*30)	Term Test (30)	Sub Total	Term Assessment
FIRST							E+F	E+F/2

SECOND							E+F	E+F/2
THIRD						NIL	E	E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column							

Maximum Marks in Parentheses

(c) **Summative Assessment.-**(i) Final university examinations conducted at the end of each professional B.A.M.S. shall be the Summative Assessment.

(ii) There shall be double valuation system and shall be no provision for revaluation.

(iii) There shall be two examiner (one internal and one external) for university practical/clinical/viva voca examinations.

(iv) While declaring the results of Summative Assessment, Internal Assessment component and Elective marks shall be considered as per the distribution of marks pattern provided in ***Tables 11, 13 & 15.***

13 The Profession wise Subjects, Number of Papers, Teaching Hours and Marks Distribution shall be as per the following tables, namely:-

Table-10

(Teaching Hours for First Professional B.A.M.S. Subjects)

First Professional B.A.M.S. Working days=320, Teaching hours=1920 Induction Programme=15 Working days (90 hours) Remaining days/Hours=320-15=305 Days/1830 Hours			
Subject Code	**Number of teaching hours**		
	Lectures	**Non-Lectures**	**Total**
AyUG-SN & AI	100	200	300
AyUG-PV	90	140	230
AyUG-KS	150	250	400
AyUG-RS	180	320	500
AyUG-SA1	140	260	400
Total	**660**	**1170**	**1830**

Table-11

(Number of Papers and Marks Distribution for First Professional B.A.M.S. Subjects)

Sl.No.	**Subject Code**	**Papers**	**Theory**	**Practical or Clinical Assessment**					**Grand Total**
				Practical/ Clinical	**Viva**	**Electives**	**IA**	**Sub Total**	
1.	AyUG-SN & AI	2	200	-	75*	10 (Set-FA)	15	100	300
2.	AyUG-PV	2	200	100	60	10 (Set-FB)	30	200	400
3.	AyUG-KS	2	200	100	70	-	30	200	400
4.	AyUG-RS	2	200	100	70	-	30	200	400

5.	AyUG-SA1	1	100	-	75	10 (Set-FC)	15	100	200
								Grand Total	**1700**

*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa

(Set-FA, FB, FC – sets of Electives for First Professional B.A.M.S.)

Table -12

(Teaching Hours for Second Professional B.A.M.S. Subjects)

Sl.No.	Subject Code	Number of teaching hours		
		Lectures	Non-Lectures	Total
1.	AyUG-DG	150	250	400
2.	AyUG-RB	150	300	450
3.	AyUG-RN	150	300	450
4.	AyUG-AT	100	200	300
5.	AyUG-SA2	100	140	240
6.	AyUG-SW	150	250	400
	Total	**800**	**1440**	**2240**

Table-13

(Number of Papers and Marks Distribution for Second Professional B.A.M.S. Subjects)

Sl. No.	Subject Code	Papers	Theory	Practical or Clinical Assessment					
				Practical or Clinical	Viva	Elective	IA	Sub Total	Grand Total
1.	AyUG-DG	**2**	**200**	**100**	**70**	**-**	**30**	**200**	**400**
2.	AyUG-RB	**2**	**200**	**100**	**70**	**-**	**30**	**200**	**400**
3.	AyUG-RN	**2**	**200**	**100**	**70**	**-**	**30**	**200**	**400**
4.	AyUG-AT	**1**	**100**	**100**	**60**	**10 (Set-SA)**	**30**	**200**	**300**
5.	AyUG-SA2	**1**	**100**	**-**	**75**	**10 (Set-SB)**	**15**	**100**	**200**
6.	AyUG-SW	**2**	**200**	**100**	**60**	**10 (Set-SC)**	**30**	**200**	**400**
							Grand Total		**2100**

(Set-SA, SB, SC – sets of Electives for Second Professional B.A.M.S.)

Table-14

(Teaching Hours for Third Professional B.A.M.S. Subjects)

Third Professional B.A.M.S. *Working days=320, Teaching hours=2240*				
Sl.No.	**Subject Code**	**Number of teaching hours**		
		Lectures	**Non-Lectures**	**Total**
1	AyUG-KC	150	300	450
2	AyUG-PK	100	200	300
3	AyUG-ST	125	250	375
4	AyUG-SL	100	200	300

5	AyUG-PS	100	175	275
6	AyUG-KB	100	175	275
7	AyUG-SA3	50	100	150
8	AyUG-RM	25	50	75
9	AyUG-EM	--	40	40
Total		**750**	**1490**	**2240**

Table- 15

(Number of Papers and Marks Distribution for Third Professional B.A.M.S. Subjects)

Sl.No.	Subject Code	Papers	Theory	Practical or Clinical Assessment					Grand Total
				Practical or Clinical	Viva	Electives	IA	Sub Total	
1	AyUG-KC	3	300	100	70	-	30	200	500
2	AyUG-PK	1	100	100	70	-	30	200	300
3	AyUG-ST	2	200	100	70	-	30	200	400
4	AyUG-SL	2	200	100	70	-	30	200	400
5	AyUG-PS	2	200	100	60	10 (Set-TA)	30	200	400
6	AyUG-KB	1	100	100	60	10 (Set-TB)	30	200	300
7	AyUG-SA3	1	100	-	75	10 (Set-TC)	15	100	200
8	AyUG-RM	1	50	-	-	-	-	-	50
								Grand Total	**2550**

(Set-TA, TB, TC – sets of Electives for Third Professional B.A.M.S.)

14 Migration of student during the study.-(1) The students may be allowed to take the migration to continue their study to another college after passing the First Professional examination, but failed student's transfer and mid-term migration shall not be allowed.

(2) For migration, the students shall have to obtain the mutual consent of both colleges and universities and it shall be against the vacant seat.

15 Compulsory Rotatory Internship.- (a) (i)The duration of Compulsory Rotatory Internship including Internship Orientation Programme shall be one year and ordinarily commence on **first working day of April for regular batch students and first working day of October for supplementary batch students.**

(ii)The student shall be eligible to join the Compulsory Internship programme after passing all the subjects from First to Third (Final) Professional examination including nine electives and after getting Provisional Degree Certificate from respective universities and Provisional Registration Certificates from respective State Board or Council for Compulsory Rotatory Internship.

(d) Stipend: During internship, to the interns belonging to Central Government, State Government and Union territory institution, the stipend shall be paid at par with other medical systems under respective government and there shall not be any discrepancy between medical systems.

(e) Migration during Internship.- (i) Migration of internship shall be with the consent of both the colleges and university; in the case where migration is between the colleges of two different universities.

(ii) If migration is only between colleges of the same university, the consent of both the colleges shall be required.

(iii) Migration shall be accepted by the university on the production of the character certificate issued by the institute or college and the application forwarded by the college and university with a 'No Objection Certificate' as the case may be.

(f) Orientation Programme.- (i) The interns shall mandatorily attend an orientation programme regarding internship and it shall be the responsibility of the teaching institution to conduct the orientation before the commencement of the internship.

(ii) The orientation shall be conducted with an intention to make the intern to acquire the requisite knowledge about the Rules and Regulations of the Medical Practice and Profession, Medical Ethics, Medico-Legal Aspects, Medical Records, Medical Insurance, Medical Certification, Communication Skills, Conduct and Etiquette, National and State Health Care Programme.

(iii) The orientation workshop shall be organised at the beginning of internship and a e-logbook shall be maintained by each intern, in which the intern shall enter date-wise details of activities undertaken by him during orientation.

(iv) The period of orientation shall be seven days.

(v) The manual for conducting the orientation as prescribed from time to time by the National Commission for Indian System of Medicine shall be followed.

(e) Activities during Internship.- (i) The daily working hours of intern shall be not less than eight hours; the intern shall maintain a e-logbook containing all the activities undertaken by intern during internship.

(ii) Normally one-year internship shall be as under-

(A) Option I.-Divided into clinical training of six months in the Ayurveda hospital attached to the college and six months in Primary Health Centre or Community Health Centre or Rural Hospital or District Hospital or Civil Hospital or any Government Hospital of Modern Medicine or Ayurveda Medicine or NABH (National Accreditation Board for Hospitals) accredited private hospital of Ayurveda. Only OPD based clinics having NABH accreditation shall not be eligible for internship.

(B) Option II**.**- All twelve months in Ayurveda hospital attached to the college.

(iii) The clinical training of six or twelve months, as case may be, in the Ayurveda hospital attached to the college or in non-teaching hospitals laid down by the National Commission for Indian System of Medicine shall be conducted as per the following table, namely:-

Table-16

(Distribution of Internship duration at Ayurveda Teaching Hospital, attached to the college)

Sl. No.	Departments	Option I	Option II
1	Kayachikitsa OPD including Manas Roga, Rasyan and Vajikarana, Swasthavritta and Yoga,AtyayikChkitisa, related specialties and respective IPD	1.5 months	3 months
2	ShalyaOPD including OT, related specialtiesand respective IPD	1 month	2 months
3	Shalakya OPD, related specialties including OT, Kriayakalpa and respective IPD	3 weeks	1.5 months
4	StrirogevamPrasutiOPD related specialties including OT and respective IPD	3 weeks	1.5 months
5	Kaumarbhritya OPD related specialties including NICU, pediatric Panchakarma and respective IPD	0.5 month	1 month

6	Panchakarma OPD related specialties, Panchakarma therapy rooms and respective IPD	1 month	2 months
7	Visha Chikitsa OPD any other specialties, respective IPD, screening OPD, Pathya unit etc. (as per choice of internee)	0.5 month	1 month
8	Primary Health Centre or Community Health Centre or Rural Hospital or District Hospital or Civil Hospital etc.	6 months	-

(iv) (a) The interns shall be posted in any of the following centers where, National Health Programme are being implemented and these postings shall be to get oriented and acquaint the knowledge of implementation of National Health Programme in regard to,-

(A) Primary Health Centre;

(B) community Health Centre or Civil Hospital or District Hospital;

(C) any recognised or approved hospital of Modern Medicine;

(D) any recognised or approved Ayurvedic Hospital or Dispensary;

(E) in a clinical unit of Central Council for Research in Ayurvedic Sciences;

(b) all the above institutes mentioned in clauses (A) to (E) shall have to be recognised by the concerned University or Government designated authority for taking such a training.

(v) The intern shall undertake the following activities in respective department in the hospital attached to the college, namely:-

(A) **Kayachikitsa.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) all routine works such as case taking, investigations, diagnosis and management of common diseases by Ayurvedic medicine;

(ii) routine clinical pathological work such as hemoglobin estimation, complete haemogram, urine analysis, microscopic examination of blood parasites, sputum examination, stool examination, Mutra evam Mala pariksha by Ayurvedic method, interpretation of laboratory data and clinical findings and arriving at a diagnosis and all pathological and radiological investigational useful for monitoring the deterioration of different disease conditions;

(iii) training in routine ward procedures and supervision of patients in respect of their diet, habits and verification of medicine schedule.

(B) **Panchakarma.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) Panchakarma &Upakarma procedures and techniques regarding Purva Karma, Pradhan Karma and Pashchat Karma;

(ii) management of procedural complications, counselling of patients for procedures, maintenance of therapy rooms etc.

(C) **Shalya Tantra.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) clinical examination, Diagnosis and Management of common surgical disorders according to Ayurvedic principles;

(ii) management of certain surgical emergencies such as fractures and dislocations, acute abdomen;

(iii) practical training of aseptic and antiseptics techniques, sterilisation;

(iv) intern shall be involved in pre-operative and post-operative managements;

(v) practical use of local anesthetic techniques and use of anesthetic drugs;

(vi) radiological procedures, clinical interpretation of X-ray, Intra Venous Pyelogram, Barium meal, Sonography and Electro Cardio Gram;

(vii) surgical procedures and routine ward techniques such as-

(a) suturing of fresh injuries;

(b) dressing of wounds, burns, ulcers and similar ailments;

(c) incision and drainage of abscesses;

(d) excision of cysts;

(e) venesection;

(f) application of Ksharasutra in ano-rectal diseases; and

(g) rakthamokshana, Agnikarma, Ksharakarma

(D) **ShalakyaTantra.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) diagnosis and management of common surgical disorders according to Ayurvedic principles;

(ii) intern shall be involved in Pre-operative and Post-operative managements;

(iii) surgical procedures in Ear, Nose, Throat, Dental problems, Ophthalmic problems;

(iv) examinations of Eye, Ear, Nose, Throat and Refractive Error with the supportive instruments in Out-Patient Department; and

(v) all kriyakalpas, Nasya, Raktamokshan, Karnapuran, Shirodhara, Putpak, Kawal, Gandush at Out-Patient and In patient Department level.

(E) **Prasuti Tantra & Stree Roga.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) antenatal and post-natal problems and their remedies, antenatal and post-natal care;

(ii) management of normal and abnormal labours; and

(iii) minor and major obstetric surgical procedures including Yoni Purna, Yoni Pichu, Uttarbasti etc.

(iv) all routine works such as case taking, investigations, diagnosis and management of common striroga by Ayurvedic medicine;

(v) screening of common carcinomatous conditions in women.

(F) **Kaumarbhritya:** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) Care of new born along with immunization programme including Svarnaprashana:

(ii) Important pediatric problems and their Ayurvedic management;

(iii) panchakarma in children.

(G) **Swasthavritta and Yoga.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-

(i) programme of prevention and control of locally prevalent endemic diseases including nutritional disorders, immunisation, management of infectious diseases, etc.;

(ii) family welfare planning programme;

(iii) aahar and Vihar Parikalpana including dinacharya, sadvritta (Life style and diet counseling daily seasonal routines); and

(iv) practice of Ashtang Yoga.

(H) **Atyayikchkitisa (Emergency or Casualty Management).-** The intern shall be practically trained to acquaint with and to make him competent to deal with all emergency conditions and participate actively in casualty section of the hospital in identification of casualty and trauma cases and their first aid treatment and also procedure for referring such cases to the identified hospitals.

(vi) Theintern shall complete online programme on public health as laid down by the National Commission for Indian System of Medicine (NCISM), in addition to their regular duties.

(vii) The internship training in Primary Health Centre or Community Center or Rural Hospital or District Hospital or Civil Hospital or any Government Hospital of modern medicine or Ayurvedic Hospital or Dispensary.- During the six months internship training in Primary Health Centre or Rural Hospital or Community Health Centre or District Hospital or any recognised or approved hospital of Modern Medicine or Ayurvedic Hospital or Dispensary, the interns shall-

(A) get acquainted with routine of the Primary Health Centre and maintenance of their records;

(B) get acquainted with the diseases more prevalent in rural and remote areas and their management;

(C) involve in teaching of health care methods to rural population and also various immunization programme;

(D) get acquainted with the routine working of the medical or non-medical staff of Primary Health Centre and be always in contact with the staff in this period;

(E) get familiarised with the work of maintaining the relevant register like daily patient register, family planning register, surgical register, etc. and take active participation in different Government health schemes or programme;

(F) participate actively in different National Health Programme implemented by the State Government.

(viii) **Electronic Logbook.-** (a) It shall be compulsory for an intern to maintain the record of procedures done/assisted/observed by him on day-to-day basis in a specified e-logbook and the intern shall maintain a record of work, which is to be verified and certified by the Medical Officer or Head of the Unit or Department under whom he works.

(b) Failure to produce e-logbook, complete in all respects duly certified by the concerned authority to the Dean/Principal/Director at the end of Internship Training Programme, may result in cancellation of his performance in any or all disciplines of Internship Training Programme.

(c) The institution shall retain soft copy of the completed and certified e-logbook and is to be made available for verification.

(ix) **Evaluation of Internship.-** (A) The evaluation system shall assess the skills of a candidate while performing the minimum number of procedures as enlisted with an objective that successful learning of these procedures will enable the candidates to conduct the same in his actual practice.

(B) The evaluation shall be carried out by respective Head of Department at the end of each posting and the reports shall be submitted to Head of the institute in Form-1 under ***Annexure-i***

(C) On completion of one year of compulsory rotatory internship including online course on Public Health, the Head of the Institute evaluate all the assessment reports in the prescribed Form-1 under ***Annexure-i,*** provided by various Head of the Department at the end of respective posting and if found satisfactory, the intern shall be issued Internship Completion Certificate in Form-2 under ***Annexure-ii*** within seven working days.

(D) If a candidate's performance is declared as unsatisfactory upon obtaining below fifteen marks as per Form-2 under ***Annexure-ii*** or less than fifty per cent. of marks, in an assessment in any of the departments he shall be required to repeat the posting in the respective department for a period of thirty per cent. of the total number of days, laid down for that department in Internship Training and posting.

(E) Candidate shall have the right to register his grievance in any aspects of conduct of evaluation and award of marks, separately to the concerned Head of the Department and Head of the Institution,

within three days from the date of completion of his evaluation, and on receipt of such grievance, the Head of the Institution in consultation with the Head of the concerned department shall redress and dispose of the grievance in an amicable manner within seven working days.

(x) Leave for interns.- (A) During compulsory rotatory internship of one year, twelve leaves are permitted and any kind of absence beyond twelve days shall be extended accordingly.

(B) Intern cannot take more than six days including prefix or suffix of any kind of holidays leave at a time.

(xi) Completion of internship: If any delay in the commencement of internship or abnormal break during internship due to unavoidable conditions, in such cases internship period shall be completed within maximum period of three years from the date of passing the qualifying examination of Third (Final) Professional B.A.M.S including First and Second Professional subjects and nine electives, specified as eligibility for internship:

Provided that in such cases, the student shall get prior permission from the head of the institution in written with all supporting documents and it shall be the responsibility of the head of the institution to scrutiny the documents, and assess the genuine nature of the request before issuing permission letter and while joining internship, the student shall submit the request letter along with supporting documents, and all necessary documents as mentioned in the sub-regulation (a) and undergo the internship orientation programme as mentioned in the sub-regulation (d).

16 Tuition Fee.-Tuition fee as laid down and fixed by respective governing or fee fixation committees as applicable shall be charged for four and half years only and no tuition fee shall be charged for extended duration of study in case of failing in examinations or by any other reasons and there shall not be any fee for internship doing in the same institute.

17 Qualifications and experience for teaching staff.- (a) Essential qualification.- (i)a Bachelor Degree in Ayurveda from a university or its equivalent as recognised by the Central Council of Indian Medicine or National Commission for Indian System of Medicine under the Act;

(ii) a Post-graduate qualification in Ayurveda in the concerned subject or specialty from a university recognised by Central Council of Indian Medicine or National Commission for Indian System of Medicine under the Act;

(iii) a valid registration with the concerned State Board or Council where he is employed or a valid Central or National Registration Certificate issued by Central Council of Indian Medicine or National Commission for Indian System of Medicine;

"This is not applicable for teachers of non-medical qualifications,"

(iv) Qualification for teacher of Sanskrit shall be a post-graduate degree in Sanskrit recognised by the University Grants Commission and a candidate with Bachelor of Ayurvedic Medicine and Surgery qualification at under graduate level and M.A. (Regular) in Sanskrit shall be given priority.

(v) The teachers having Bachelor Degree in Ayurveda medicine and having post-graduation in relevant modern science disciplines as referred to clause (h) of section 2 of Act, and as mentioned in section 10 of these regulations and having University Grants Commission/Council of Scientific and Industrial Research/Indian Council of Medical Research National Eligibility Test qualification shall be eligible to appoint without qualifying the National Teachers Eligibility Test.

(vi) Teacher with the following qualifications obtained from a recognised university or institution may be appointed in respective departments as per following table, namely: -

Table-17

(Qualifications and Departments for Appointment)

Sl.No.	Qualification	Department
1	B.A.M.S. and MSc Anatomy	Rachana Sharira
2	B.A.M.S. and MSc Physiology	Kriya Sharira

3	B.A.M.S. and MPH	Swasthavritta & Yoga
4	B.A.M.S. and MSc Ayurbiology	Samhita & Siddhanta

Teachers with above qualifications shall not be more than one in specified departments.

(b) Experience.- (i) For post of Professor.-

(A) Ten years of teaching experience as regular teacher in the concerned subject or five years teaching experience as Associate Professor (Reader) on regular basis in the concerned subject; or

(B) Ten years research experience as fulltime researcher (after possessing Post-graduate qualification in the concerned subject) in Research Councils of Central Government or State Government or Union territory or University or National Institution or National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited Research Laboratory or ten years of experience in regular service (after possessing Post-graduate qualification in the concerned subject) in Central Government Health Services or State Government Health services, Ministry of Ayush or ten years of experience (after possessing Post-graduate qualification in the concerned subject) as Assistant Registrar or Registrar in Central Council of Indian Medicinehaving qualified National Teachers Eligibility Test from the date it is operational and with any one of the following three criteria, namely:- (i) Minimum of five research articles published in index journals (UGC-CARE, PubMed, Web of Science, Science Citation Index, SCOPUS); or

(ii) Minimum of three research articles published in index journals (UGC-CARE, PubMed, Web of Science, Science Citation Index, SCOPUS) and one Published book or Manual relevant to Ayurveda; or

(iii) Investigator for any major research project (duration of the project three years and above as per the sanctioned letter); and

(iv) Having post-graduate qualification in concerned subject except in the subjects or specialty of Shalya, Shalakya and Stree Rog evam Prasuti tantra:

provided that the in-service candidate shall have completed his post-graduation in concerned subject before the completion of forty-five years of his age.

(ii) For post of Associate Professor.-

(A) Five years of teaching experience as regular teacher in the concerned subject; or

(B) Five years of research experience as fulltime researcher (after possessing Post-graduate qualification in the concerned subject) in Research Councils of Central Government or State Government or Union territory or University or National Institutions or National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited Research Laboratories or five years of experience in regular service (after possessing Post-graduate qualification in the concerned subject) in Central Government Health Services or State Government Health services, Ministry of Ayush or five years of experience (after possessing Post-graduate qualification in the concerned subject) as Assistant Registrar or Registrar in Central Council of Indian Medicine having qualified National Teachers Eligibility Test from the date it is operational and with any one of the following three criteria, namely:- (i) minimum of three research articles published in indexed journals (UGC-CARE, PubMed, Web of Science, Science Citation Index, Scopus); or

(ii) Minimum of one research article published in indexed journals (UGC-CARE, PubMed, Web of Science, Science Citation Index, Scopus) and one Published book or Manual relevant to Ayurveda; or

(iii) Investigator for any major research project (duration of the project three years and above as per the sanctioned letter) or minor research project (duration of the project less than three years as per the sanctioned letter); and

(iv) Having post-graduate qualification in concerned subject except in the subjects or specialty of Shalya, Shalakya and Stree Rog evam Prasuti tantra:

Provided that the in-service candidate shall have completed his post-graduation in concerned subject before the completion of forty-five years of his age.

(iii) For post of Assistant Professor.- No teaching experience shall be required but, the age shall not exceed forty-five years at the time of first appointment.

(iv) Qualification for teacher of Research Methodology and Medical Statistics shall be a post-graduate degree in Medical Statistics or Biostatistics or Epidemiology or other relevant discipline of Research Methodology or Medical Statistics:

Provided that the post-graduates of Ayurveda, who have studied Research Methodology or Medical Statistics as one of the subjects in their post-graduation, and the post-graduates of Ayurveda, who have successfully completed the online course in Research Methodology or Medical Statistics conducted by the National Institute of Epidemiology of Indian Council of Medical Research shall also be eligible to teach the subject of Research Methodology and Medical Statistics and shall be given preference at the time of appointment and the teacher of Research Methodology and Medical Statistics can be appointed on part time basis and shall work under the department of Swasthavritta and Yoga and such part time teachers shall not be provided teachers code.

(v) Qualification for Yoga instructor (full time) shall be minimum a graduate degree in Yoga and shall work under department of Swasthvritta and Yoga. Post graduate in Swasthavritta shall also be eligible for the same. There shall not be teacher code for the post of instructor.

(vi) Teachers appointed with qualifications of MSc Anatomy, MSc Physiology, MPH and MSc Ayurbiology including Sanskrit teacher as Assistant Professors or Lecturers will be eligible for the post of Reader or Associate Professor after seven years of experience and twelve years of teaching experience for the post of Professor and such teachers shall not be eligible for the post of Head of the Department as well as Head of the Institution.

(vii) The research experience of Doctor of Philosophy (PhD).- The actual research duration i.e., the date of joining to the date of submission of thesis and not more than three years shall be considered as teaching experience and PhD seat allotment letter, Proof of joining to full-time PhD programme and proof of submission of thesis to the university shall be considered as evidence in this regard.

(viii) Temporary appointment or temporary promotion of teacher shall not be considered for eligibility.

(ix) In case of deputation of Medical Officer as teacher, it shall be with qualifications, designations and experience as specified in this regulation and the deputation shall not be less than three years and any emergency withdrawal shall be after proper replacement or alternate arrangement.

(x) The teachers got appointed in allied subjects, if desires to return to parent department, they may return within three years from the date of notification of this regulation and in such case, the allied subject experience of National Commission for Indian System of Medicine approved teachers shall be considered as regular experience in parent department and the National Commission for Indian System of Medicine approved teachers who remained in allied subjects shall be considered as regular teacher of respective department and eligible for promotion as regular teacher as specified in this regulation.

(c) Qualification and experience for Post of Head of the Institution.- The qualification and experience for the post of Head of the Institution (Principal or Dean or Director) shall be the same qualification and experience as specified for the post of Professor with minimum three years of administrative experience (Vice Principal or Head of the Department or Deputy Medical Superintendent or Medical Superintendent etc.)

(d) Salary.- (a) For the teacher of Government or Government aided institution or Government Deemed University**.-** The Salary and allowances including Non Practicing Allowance as applicable shall be paid to the teacher at par with the norms laid down by the Central Government or University Grants Commission or the State Government or Union territory as the case may be and there shall not be any discrepancy of salary structure between medical systems.

(b) For the teacher of self-financing college including Central Private deemed University or State Private deemed university**.-** (i) The minimum basic pay shall be as per the following table, namely:-

Table-18

(Minimum Monthly Salary)

Sl.No.	Post	Pay scale
1.	Assistant Professor	Pay Level-10, Pay Matrix Rs. 56,100-1,77,500 (as per 7th CPC)
2.	Associate Professor	Pay Level-12, Pay Matrix Rs. 78,800-2,09,200 (as per 7th CPC)
3.	Professor	Pay Level-13, Pay Matrix Rs. 1,23,100-2,15,900 (as per 7th CPC)
4.	Head of the Institution	Pay Level-13A, Pay Matrix Rs. 1,31,100-2,16,600 (as per 7th CPC)

(ii) (a) This shall be the minimum prescribed salary and shall not be restrictive for higher salary structure.

(b) Monthly salary shall be paid along with applicable allowances as per respective employers policy and annual increment with respect to the year of experience to the concerned cadre or post.

(c) The institute which is already paying higher salary structure shall continue with the same.

(d) Corresponding Pay structure as applicable shall be adopted as and when Central Pay Commission (CPC) revises pay scales.

(c) The Salary shall be credited to the salary account through bank transfer and necessary facilities to the teacher such as, Provident Fund or Employees' State Insurance, etc. shall be provided by the college and Income Tax deduction certificate such as form 16 shall be issued by the college to the teacher as per the norms.

(d) The college shall issue appointment and promotion order in which the details such as salary, notice period for resignation, minimum attendance to be maintained by the teacher shall be clearly mentioned.

(e) Age of superannuation of teacher.-The age of superannuation of teachers shall be as per the order of the Central Government or State Government or Union territory and the retired teachers, fulfilling the eligibility norms of teachers may be re-employed up to the age of sixty-five years as fulltime teacher.

(f) Unique teacher's code.-(i) A unique teacher's code for all eligible teachers, shall be allotted by the National Commission for Indian System of Medicine after their appointment in the college through an Online Teachers Management System on application within seven working days from the date of joining and the Promotion or Relieving or Transfer of Department of all such teachers shall be facilitated and monitored through the Online Teachers Management System (OTMS).

(ii) Institute and Teacher shall update profile in the Online Teachers Management System (OTMS) from time to time with respect to promotion, department transfer, relieving etc.

(g) The Commission shall have the power to withdraw the teacher's code on ethical and disciplinary grounds.

(h) The Commission shall have the power to withdraw or withheld the teacher's code if the teacher discontinues the teaching profession or not joined any institution for any reason and he may rejoin the teaching profession with the same teacher's code after completing the procedure as specified by National Commission for Indian System of Medicine from time to time.

(i) **Attendance of teacher.-** The teacher shall abide by the guidelines and mandates as laid down by the National Commission for Indian System of Medicine from time to time and shall have at least 75 per cent. of attendance during the working days of every calendar year.

(j) **Development and Training of Faculty Member.-** Once in every three years teachers shall undergo Medical Education Technology (MET) or Quality Improvement Programme (QIP) conducted by National Commission for Indian System of Medicine or designated authority

18 Appointment of examiner In Ayurveda.-No person other than regular or retired teacher with minimum five years of teaching experience in the concerned subject shall be considered eligible for examinership and the maximum age limit of Examiner shall be sixty-five years.

Note:

(a) The post-graduate degree holder in the old nomenclature, namely, Ayurveda Vachaspati-Ayurveda Sidhant, Ayurveda Vachaspati- Ayurved Samhita, Ayurveda Vachaspati- Kriya Sharir (Dosha-Dhatu-Mala Vigyana) and Ayurveda Vachaspati-Bhaishajya Kalpana as mentioned in Post-graduate Education Regulations, 2005, may be appointed in the concerned department like, holder of Dosha Dhatu Malavigyana in the department of Kriya Sharira, holder of Samhita or Siddhant in the department of Samhita and Basic Principles of Ayurveda, holder of Bhaishajya Kalpana in the department of Rasa Shastra evamBhaishajya Kalpana and similarly, the post-graduate degree holder in the old nomenclature, namely, Ayurveda Dhanvantri - Shalya - Samanya, Ayurveda Dhanvantri – Kshar Karma evamAnushastra Karma, Ayurveda Dhanvantri – Shalakya – Netra Roga, Ayurveda Dhanvantri – Shalakya – Shiro- Nasa Karna evam Kantha Roga, Ayurveda Dhanvantri – Shalakya – DantaevamMukhaRoga, Ayurveda Vachaspati-Sangyaharan, Ayurveda Vachaspati- ChhayaevamVikiran Vigyan, Ayurveda Dhanvantri – Asthi Sandhi and MarmagatRoga and Ayurveda Vachaspati- SwasthaVritta and Yoga as mentioned in Post-graduate Education Regulations, 2012, may be appointed in the concerned department like, holder of Shalya - Samanya in the department of Shalya, holder of Kshar Karma evamAnushastra Karma in the department of Shalya, holder of Shalakya – Netra Roga in the department of Shalakya, holder of Shalakya – Shiro- Nasa Karna evam Kantha Roga in the department of Shalakya, holder of Shalakya – DantaevamMukhaRoga in the department of Shalakya, holder of Sangyaharan in the department of Shalya, holder of ChhayaevamVikiran Vigyan in the department of RogNidan, holder of Asthi Sandhi and MarmagatRoga in the department of Shalya and holder of Swasthavritta and Yoga in the department of Swasthavritta.

(b) The post-graduate degree holder of newly developed specialty, namely, Ayurveda Vachaspati-Yoga as mentioned in Indian Medicine Central Council (Post Graduate Ayurveda Education) Regulations, 2016 may be appointed in the department of Swasthavritta and Yoga. Post-graduate holders of Rasayana & Vajikarana and Manasaroga may be appointed in Kayachikitsa.

RAGHURAMA BHATTA U., Secy. I/c.

[ADVT.-III/4/Exty./647/2021-22]

Appendix "A"

[See regulation 5 (4)]

SCHEDULE relating to "SPECIFIED DISABILITY" referred to in clause (zc) of section 2 of the Rights of Persons with Disabilities Act, 2016 (49 of 2016), provides as under:-

1. Physical disability-

(A) Loco motor disability (a person's inability to execute distinctive activities associated with movement of self and objects resulting from affliction of musculoskeletal or nervous system or both), including-

(a) "Leprosy cured person" means a person who has been cured of leprosy but is suffering from-

(i) Loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity,

(ii) Manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity,

(iii) Extreme physical deformity as well as advanced age which prevents him/her from undertaking any gainful occupation, and the expression "leprosy cured" shall construed accordingly,

(b) "Cerebral palsy" means a Group of non-progressive neurological condition affecting body movements and muscle coordination, caused by damage to one or more specific areas of the brain, usually occurring before, during or shortly after birth.

(c) "Dwarfism" means a medical or genetic condition resulting in an adult height of 4 feet 10 inches (147 centimetres) or less,

(d) "Muscular dystrophy" means a group of hereditary genetic muscle disease that weakens the muscles that move the human body and persons with multiple dystrophy have incorrect and missing information in their genes, which prevents them from making the proteins they need for health muscular. It is characterized by progressive skeletal muscle weakness, defects in muscle proteins, and the death of muscle cells and tissue,

(e) "acid attack victims" means a person disfigured due to violent assaults by throwing of acid or similar corrosive substance.

(B) Visual impairment-

(a) "blindness" means a condition where a person has any of the following conditions, after best correction-

(i) Total absence of sight, or

(ii) Visual acuity less than 3/60 or less than 10/200 (Snellen) in the better eye with best possible correction, or

(iii) Limitation of the field of vision subtending an angle of less than 10 degree.

(b) "Low-vision" means a condition where a person has any of the following conditions, namely:-

(i) Visual acuity not exceeding 6/18 or less than 20/60 upto 3/60 or upto 10/200 (Snellen) in the better eye with best possible corrections; or

(ii) Limitation of the field of vision subtending an angle of less than 40 degree up to 10 degree.

(C) Hearing impairment-

(a) "Deaf" means persons having 70 DB hearing loss in speech frequencies in both ears;

(b) "Hard of hearing" means person having 60 DB hearing loss in speech frequencies in both ear,

(D) "Speech and language disability" means a permanent disability arising out of conditions such as laryngectomy or aphasia affecting one or more components of speech and language due to organic or neurological causes.

2. Intellectual disability a condition characterized by significant limitation both in intellectual functioning (reasoning, ;learning, problem solving) and in a dative behaviour which covers a range of every day, social and practical skills, including-

(a) "Specific learning disabilities" means a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty to comprehend, speak, read, write, spell, or to do mathematic calculations and includes such conditions as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia and developmental aphasia.

(b) "Autism spectrum disorder" means a neuro-developmental condition typically appearing in the first three years of life that significantly affects a person's ability to communicate, understand relationships and relate to others and is frequently associated with unusual or stereotypical rituals or behaviours.

3. Mental behaviour- "means illness" means a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgment, behaviours, capacity to recognize reality or ability to meet the ordinary demands of life, but does not include retardation which is a condition of arrested or incomplete development of mind of a person,

4. Disability caused due to-

(a) Chronic neurological conditions, such as-

(i) "Multiple sclerosis" means an inflammatory, nervous system disease in which the myelin sheaths around the axons of nerve cells of the brain and spinal cord aredamaged, leading to demyelisation and affecting the ability of nerve cells in the brain and spinal cord to communicate with each other.

(ii) "Parkinson's disease" means a progressive disease of the nervous system marked by tremor, muscular rigidity and slow, imprecise movement, chiefly affecting middle-aged and elderly people associated with degeneration of the basal ganglia of the brain and a deficiency of the neurotransmitter dopamine.

(b) Blood disorder-

(i) "Haemophilia" means an inheritable disease, usually affecting only male but transmitted by women to their male children, characterised by loss or impairment of the normal clotting ability of bold so that a minor would may result in fatal bleeding,

(ii) "Thalassemia" means a group of inherited disorders characterized by reduced or absent amounts of haemoglobin.

(iii) "Sickle cell disease" means a haemolytic disorder characterised by chronic anaemia, painful events, and various complication due to associated tissue and organ damage, "Haemolytic" refers to the destruction of cell membrane of red blood cells resulting in the release of haemoglobin,

5. Multiple Disabilities (more than one of the above specified disabilities) including deaf blindness which means a condition in which a person may have combination of hearing and visual impairments causing severe communication, developmental, and educational problems.

6. Any other category as may be notified by the Central Government from time to time.

Appendix "B"

[See regulation 5 (4)]

Guidelines regarding admission of students, with "Specified Disabilities" under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), in B.A.M.S.

1. The "Certificate of Disability" shall be issued in accordance with the Rights of Persons with Disabilities Rules, 2017, published in the Gazette of India, Extraordinary, Part II, Section3, Sub-section (i), vide number G.S.R. 591 (E), dated the 15the June, 2017.
2. The extent of "specified disability" in a person shall be assessed in accordance with the "guidelines for the purpose of assessing the extent of specified disability in a person included under the Rights o Persons with Disabilities Act, 2016 (49 of 2016)", published in the Gazette of India, Extraordinary, Part II, section 3, Sub-section (ii), vide number S.O. 76 (E), dated the 4th January, 2018.
3. The minimum degree of disability should be 40% (Benchmark Disability) in order to be eligible for availing reservation for persons with specified disability.
4. The term 'Persons with Disabilities' (PwD) is to be used instead of the term 'Physically Handicapped' (PH

TABLE

Sl. No.	Disability Category	Type of Disabilities	Specified Disability	Disability Range		
				(5)		
(1)	(2)	(3)	(4)	Eligible for B.A.M.S. Programme, Not Eligible for	Eligible for B.A.M.S. Programme, Eligible for PwD Quota	Not Eligible for Programme,

				PwD Quota		
1.	Physical Disability	(A) Locomotor Disability, including Specified Disabilities (a to f).	(a) Leprosy cured person* (b) Cerebral Palsy** (c) Dwarfism (d) Muscular Dystrophy (e) Acid attack victims (f) Other*** such as Amputation, Poliomyelitis, etc.	Less than 40% disability	40-80% disability Persons with more than 80% disability may also be allowed on case to case basis and their function a incompetency will the aid of assistive devices, if it is being used, to see if its is brought below 80% and whether they ppssess sufficient motor ability as required to pursue and complete the programme satisfactorily.	More than 80%
			* Attention should be paid to loss of sensations in fingers and hands, amputation, as well as involvement of eyes and corresponding recommendations be looked at. ** Attention should be paid to impairment of vision, hearing, cognitive function etc. and corresponding recommendations be looked at. *** Both hands intact, with intact sensations, sufficient strength and range of motion are essential to be considered eligible for B.A.M.S. programme.			
		(B) Visual Impairment (*)	(a) Blindness (b) Low vision	Less than 40% disability (i.e. Category '0 (10%)' I (20%)' & II (30%)		Equal to or More than 40% Disability (i.e. Category III and above)
		(C) Hearing Impairment @	(a) Deaf (b) Hard of hearing	Less than 40% Disability		Equal to or more than 40% Disability
			(*) Persons with Visual impairment/ visual disability of more than 40% may be made eligible to pursue Graduate B.A.M.S. Education and may be given reservation, subject to the condition that the visual disability is brought to a level of less than the benchmark of 40% with advanced low vision aids such as telescopes / magnifier etc. @ Persons with hearing disability of more than 40% may e made eligible to pursue Graduate B.A.M.S. Education and may be given reservation, subject to the condition that the hearing disability is brought to a level of less than the benchmark of 40% with the aid of assistive devices. In addition to this, the individual should have a speech discrimination score of more than 60%.			
		(D) Speech & language	Organic/neurological causes	Less than 40%		Equal to or more than

		disability		Disability		40% Disability
		It is proposed that for admission to B.A.M.S. programme the Speech Intelligibility Affected (SIA) score shall not exceed 3 (Which will correspond to less than 40%) to be eligible to pursue the B.A.M.S. programme. The individuals beyond this score will not be eligible for admission to the B.A.M.S. programme. Persons with an Aphasia Quotient (AQ) upto 40% may be eligible to pursue B.A.M.S. programme but beyond that they will neither be eligible to pursue the B.A.M.S. programme nor will they have any reservation.				

2.	Intellectual disability		(a) Specific learning disabilities (Perceptual disabilities, Dyslexia, Dyscalculia, Dyspraxia & Developmental aphasia)#	# currently there is no Quantification scale available to assess the severity of SpLD, therefore the cut-off of 40% is arbitrary and more evidence is needed.		
				Less than 40% Disability	Equal to or more than 40% disability But selection will be based on the learning competency evaluated with the help of the remediation/assisted technology/aids/infrastructural changes by the Expert Panel.	
			(b) Autism spectrum disorders	Absence or Mild Disability, Asperser syndrome (disability of 40-60% as per ISAA) where the individual is deemed fit for B.A.M.S. programme by an expert panel	Currently not recommended due to lack of objective method to establish presence and extent of mental illness. However, the benefit of reservation/quot a may be considered in future after developing better methods of disability assessment.	Equal to or more than 60% disability or presence of cognitive/intellectual disability and or if the person is deemed unfit for pursuing B.A.M.S. programme by an expert panel.
3.	Mental Behaviour		Mental illness	Absence or mild Disability: less than 40% (under IDEAS)	Currently not recommended due to lack of objective method to establish presence and extent of mental illness. However, the benefit of reservation/quota may be considered in future after developing better methods of disability assessment.	Equal to or more than 40% disability or if the person is deemed unfit to perform hi/her duties. Standards may be drafted for the definite of "fitness to practice medicine" as are used by several institutions of countries other than India.

4.	Disability caused due to	(a) Chronic Neurological Conditions	(i) Multiple Sclerosis	Less than 40% Disability	40%80% disability	More than 80%
			(ii) Parkinsonism			
		(b) Blood Disorders	(i) Haemophilia	Less than 40% Disability	40%80% disability	More than 80%
			(ii) Thalassemia			
			(iii) ickle cell disease			
5.	Multiple disabilities including deaf blindness		More than one of the above specified disabilities	Must consider all above while deciding in individual cases recommendations with respect to presence any of the above, namely , visual, Hearing, Speech & Language disability, Intellectual Disability, and Mental Illness as a component of Multiple Disability. Combining formula as notified by the related Gazette Notification issued by the Govt. of India $\frac{a+b\,(90-a)}{90}$ (where a=higher value of disability % and b=lower value of disability % as calculated for different disabilities) Is recommended for computing the disability arising when more than one disabling condition is present in a given individual. This formula may be used in cases with multiple disabilities, and recommendations regarding admission and/or reservation made as per the specific disabilities present in a given individual		

Note: For selection under PwD category, candidates will be required to produce Disability Certificate before their schedule date of counselling from one of the disability assessment boards as designated by concerned Authority of Government of India.

Annexure-i

FORM 1

[See regulation 15(e)(ix) (B)(C)(D)]

(NAME OF THE COLLEGE AND ADDRESS)

AYURVEDACHARYA

(BACHELOR OF AYURVEDIC MEDICINE AND SURGERY – B.A.M.S) PROGRAMME

DEPARTMENT OF----------

CERTIFICATE OF ATTENDANCE & ASSESSMENT OF INTERNSHIP

Name of the Intern

Attendance during internship

Period of training From----------To----------

(a) No. of Working Days :

(b) No. of Days Attended :

(c) No. of Days Leave availed :

(d) No. of Days Absent :

Assessment of Internship

Sr. No.	Category	Marks Obtained
1.	General	Maximum 10
a.	Responsibility and Punctuality	(_____) out of 2
b.	Behaviour with sub-ordinates, Colleagues and superiors	(_____) out of 2
c.	Documentation ability	(_____) out of 2
d.	Character and conduct	(_____) out of 2
e.	Aptitude of research	(_____) out of 2
2.	Clinical	Maximum 20
a.	Proficiency in Fundamentals of subject	(_____) out of 4
b.	Bedside manners & Rapport with patient	(_____) out of 4
c.	Clinical Acumen and Competency as acquired	(_____) out of 4
i.	By Performing Procedures	
ii.	By Assisting in Procedures	(_____) out of 4
iii.	By Observing Procedures	(_____) out of 4
Total Score obtained		**(_____) out of 30**

Performance Grade of marks

Poor <8, Below average 9-14, Average 15-21, Good 22-25, Excellent 26 and above

Note: An intern obtained unsatisfactory score (below 15) shall be required to repeat one third of the total period of posting in the concerned department.

Date:

Place:

Signature of the Intern Signature of the Head of the Department

Office Seal

Annexure-ii

FORM 2

[See regulation 15(e) (ix) (C) (D)]

(NAME OF THE COLLEGE AND ADDRESS)

AYURVEDACHARYA

(BACHELOR OF AYURVEDIC MEDICINE AND SURGERY – B.A.M.S) PROGRAMME

CERTIFICATE OF COMPLETION

OF THE COMPULSORY ROTARY INTERNSHIP

This is to certify that (name of the intern) Intern of (NAME OF THE COLLEGE AND ADDRESS), has completed his/her Compulsory Rotatory Internship at the (NAME OF COLLEGE AND ADDRESS/PLACE OF POSTING), for the duration of one year from ____to_____in the following departments,

Sl. No.	Name of the department	Period of training from (dd/mm/yyyy)	Period of training to (dd/mm/yyyy)

During the internship period the conduct of the student is_____

Date:

Place:

Signature of the Principal/Dean/Director
Office Seal

Annexure-iii

A. TENTATIVE TEMPLATE OF ACADEMIC CALENDAR

FIRST PROFESSIONAL B.A.M.S.

(18 MONTHS)

Sl.No.	DATE/PERIOD	ACADEMIC ACTIVITY
1.	First Working Day of October	Course Commencement
2.	15 working Days	Induction Programme & Transitional Curriculum
3.	Fourth Week of March	First Internal Assessment
4.	Three weeks in May	Summer Vacation
5.	Fourth Week of September	Second Internal Assessment
6.	First & Second week of February	Preparatory holidays
7.	Third Week of February onwards	University Examination
8.	***First Working Day of April***	***Commencement of Second Prof. B.A.M.S.***
	NOTE.- 1. Universities/Institutions/Colleges shall specify dates and year while preparing academic calendar of that particular batch of students. The same is to be informed to students and displayed in respective websites. 2. Institutions/Colleges established in Extreme Weather Conditions may adjust the vacation as required by maintaining the stipulated hours of teaching. However, the structure of academic calendar shall not be altered.	

B. TENTATIVE TEMPLATE OF ACADEMIC CALENDAR

SECOND PROFESSIONAL B.A.M.S.

(18 MONTHS)

Sl.No.	DATE/PERIOD	ACADEMIC ACTIVITY
1.	First Working Day of April	Course Commencement
2.	Fourth Week of September	First Internal Assessment
3.	Fourth Week of March	Second Internal Assessment
4.	Three weeks in May	Summer Vacation
5.	First & Second week of August	Preparatory Holidays
6.	Third Week of August onwards	University Examination
7.	***First Working Day of October***	***Commencement of Third Prof. B.A.M.S.***
	NOTE.- 1. Universities/Institutions/Colleges shall specify dates and year while preparing academic calendar of that particular batch of students. The same is to be informed to students and displayed in respective websites. 2. Institutions/Colleges established in Extreme Weather Conditions may adjust the vacation as required by maintaining the stipulated hours of teaching. However, the structure of academic calendar shall not be altered.	

C. TENTATIVE TEMPLATE OF ACADEMIC CALENDAR

THIRD PROFESSIONAL B.A.M.S.

(18 MONTHS)

Sl. No.	DATE/PERIOD	ACADEMIC ACTIVITY
1.	First Working Day of October	Course Commencement
2.	Fourth Week of March	First Internal Assessment
3.	Three weeks in May	Summer Vacation
4.	Fourth Week of September	Second Internal Assessment
5.	First & Second week of February	Preparatory holidays
6.	Third Week of February onwards	University Examination
7.	***First Working Day of April***	***Commencement of Internship***
	NOTE.- 1. Universities/Institutions/Colleges shall specify dates and year while preparing academic calendar of that particular batch of students. The same is to be informed to students and displayed in respective websites. 2. Institutions/Colleges established in Extreme Weather Conditions may adjust the vacation as required by maintaining the stipulated hours of teaching. However, the structure of academic calendar shall not be altered.	

Annexure-iv

GUIDELINES FOR ATTENDANCE MAINTENANCE

(THEORY/PRACTICAL/CLINICAL/NON-LECTURE HOURS)

Institutes, Colleges offering education in various courses in Indian System of Medicine are recommended to maintain online attendance system. However, in case physical registers are being maintained for recording attendance of various teaching/training activities, the following guidelines are to be followed:

(1) Attendance is to be marked in cumulative numbering fashion.

- **(a)** In case presence is to be marked as 1, 2, 3, 4, 5, 6……so on;
- **(b)** In case of absence, it must be marked as ‘A’ ;
- **(c)** Example: P PPP A P P AA P P P…. may be marked as (1, 2, 3, 4, A, 5, 6, A, A, 7, 8, 9…).

(2) Avoid strictly marking ‘P’ for presence.

(3) Separate register for Theory and practical/clinical/non-lecture activities are to be maintained.

(4) At the end of term or course or part of syllabus, the last number to be taken as total attendance.

(5) The total attendance after students signature to be certified by respective HOD followed by approval by Principal.

(6) In case of multiple terms, at the end of course all term attendance is to be summarised and percentage is to be calculated separately for theory and practical including clinicals & non-lecture hours.

[Note : *lf any discrepancy in found between Hindi and English version, the English version will be treated as final.]

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.